



11th EMAC regional conference

Challenging
the status quo
in marketing
research

September 16-19, 2020
Zagreb, Croatia



University of Zagreb
Faculty of
Economics & Business

Conference Proceedings



11th EMAC Regional Conference

"Challenging the status quo in marketing research"

Edited by:

Morana Fudurić, Ph.D.

Sandra Horvat, Ph.D.

Tanja Komarac, Ph.D.

Vatroslav Škare, Ph.D.

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Type:

Conference Proceedings

Published by:

University of Zagreb, Faculty of Economics & Business

Year:

2020

ISSN: 2709-1589

©University of Zagreb, Faculty of Economics & Business

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Foreword

The 11th EMAC Regional Conference 2020 was a unique and different conference compared to previous EMAC conferences. It was the only EMAC conference in 2020, due to the COVID-19 pandemic, and the first EMAC conference in history to be held completely online. In that sense, the 11th EMAC Regional Conference became the meeting point for 169 marketing academics and practitioners not only from the region but from 36 countries all over the world.

In the advent of new technologies that have (re)shaped our world in the past several decades, doing marketing research has become more exciting, but also more challenging than ever. Today, there is no area of marketing that has not been affected by technology; from the evolving landscape of martech; the role of technology in mapping the consumer journey and the consumer decision-making process; the rise of multi-sided platforms and omnichannel marketing; big data and prescriptive analytics; artificial intelligence, virtual and augmented reality to strategic and ethical implications and challenges such developments bring. This is why we have decided to call for more interdisciplinarity and collaboration in marketing research, and define "*Challenging the status quo in marketing research*" as the overarching theme of this year's conference.

The 11th EMAC Regional Conference Proceedings offer a collection of 37 papers presented at the conference. They cover a variety of attractive marketing topics using a wide range of methodologies; from qualitative and quantitative to mixed-methods research. Also, the papers provide insights from both the consumer and company perspective to answer new and contemporary marketing problems related to food marketing, privacy concerns, sensory marketing, sustainable consumption, shared vs public mobility services, and value co-creation. Furthermore, the researchers aimed to shed more light on branding in different contexts, the COO effect, and retailing, both offline and online. Some are providing new perspectives on business tourism, entrepreneurial marketing and other areas of non-profit marketing

Since the majority of the papers was written in very challenging times and circumstances, we would like to congratulate and express our gratitude to all the authors for their persistence and willingness to write the papers and participate in the conference. Also, we are very grateful to our reviewers who contributed to the conference (please see a full list at the end of Conference Proceedings).

Finally, we would like to invite you to browse through and read these papers to use them as a stepping stone for your future research.

Zagreb, September 2020.

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What Does It Mean to Be Myself (Away From Home)? Bridging the Gap to Hedonic Consumption

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Abstract:

The current research attempts to answer questions about differing motivations (hedonic, utilitarian) for consumption of products and experiences, working on how individuals adapt their perceptions with varying mental construals surrounding these experiences. The research method relies on an innovative data collection approach, Album On-Line (AOL), to analyze individuals' projective representations and assess their consensus through an INDSCAL approach. These representations help in framing a consumer-centric representation of the affective and cognitive motivations for consumption, based on thought processing (distant, proximal) and language (English/French), in line with contemporary global(cal)ized communications.

Keywords: *hedonic consumption, psychological proximity, consumer journeys*

1. Introduction

An understanding of hedonic consumption largely concerns how the context is built and processed in consumers' minds, which also serves as the driving force for this research. Although consumer research can be credited to be amongst the few domains which had started defining this vast subject, there remains a huge amount of work to be done in this regard (Alba & Williams, 2013; Hirschman & Holbrook, 1982). The objectives of this research include: 1) an understanding of the varying motivations for hedonic and utilitarian product consumption; 2) demarcating the boundary (conditions) for decision making in terms of affective and cognitive motivations, respectively linked to hedonic and utilitarian product consumptions; 3) improve an understanding of the thought processes linked to product choices and brand recall in terms of individual-level product descriptions of hedonic and utilitarian attributes. A mixed-method research framework was chosen as a primary step towards answering these research questions in fulfilling these research objectives.

2. Conceptual Framework

Within the domains of psychology and marketing, there is little consensus on defining a concept as enduring as pleasure, the pursuit of pleasure and the varying connotations associated to its different consumption forms. Two large enigmas that encircle this consumption domain are the ability to demarcate it from alternate forms, while also inclusively understanding the different instances where individuals optimally realize the act of hedonic consumption. Given the occurrence and diversity with which consumers pursue pleasure, it can be a daunting task to define the process of hedonic consumption. According to Alba & Williams, (2013), a broader, motivation based approach is apposite for understanding the various hedonic or utilitarian motivations for different product categories.

1.1 *Indulging in hedonism*

While prior studies have shown that certain products weigh higher on hedonistic attributes such as sensory and experiential characteristics, certain other products have a greater tendency of utilitarian characteristics including more functional attributes (Batra & Ahtola, 1991). While these polarized distinctions have certain identifiable attributes, a pure hedonic product such as chocolate may be consumed for cardiovascular benefits from dark chocolate [utilitarian motivation] or a dominantly practical product such as laundry detergent can be bought for its aesthetically pleasing fragrance [hedonic motivation] (Alba & Williams, 2013). A similar blurry distinction could be observed for various consumer activities such as going for a run or gardening, wherein the inherent toll is sometimes seen as a pleasure source rather than a source of fatigue (Crossen, 2006; Linden, 2012).

Although hedonic consumption generally includes all forms of consumption associated with a high sense of emotive attachment and affective reasoning (Hirschman & Holbrook, 1982), there still needs to be a finer distinction in terms of anticipated goals or expected benefits from a product.

1.1.1 *Hedonic consumption*

As per the initial definition of hedonic consumption, it generally relates to the multisensory, fantasy and emotive aspects of a product's experiential consumption rather than the objective benefits accorded by it. This would include all forms of highly emotive and affect-laden

experiences, expanding to ideas of virtues and vices, symbolic and functional products (Hirschman & Holbrook, 1982).

One of the multifaceted aspects of hedonic consumption involves an activation of the sensory perceptions. Multisensory perception involves the registry of an experience across different senses such as vision, audition, gustation, olfaction and somatosensation, a priori through interaction with a product or experience. Consumers not only register felt sensations through the brain but also record them for a future recollection, recalled later through their senses. For instance, the nostalgia arising from a known fragrance in the halls of a lavish hotel or a luxury store, which the consumer has already experienced previously. This can also be the reminiscence of an image which has been reconstructed from memory with an accumulation of sensory and fantasy elements, to complete an unfinished historic imagery with fantasy based elements (Hirschman & Holbrook, 1982; Singer, 1966). For example, recalling the self as holding a red umbrella out in the rain in Manhattan; herein being out in the rain in Manhattan is a fictional account from a movie; the umbrella's imagery derives itself from an actual possession.

The earlier decades of marketing as a domain were widely dominated by symbolic usage of products such as the Marlboro man, Mountain Dew's Clem/Willy imagery, focusing more on the aspects of a product's connotations, visual appeal and the identification with a certain milieu or entourage that it signified (Champniss et al., 2015; Levy, 1959). Such instances of multisensory images relied on the retrieval of a fictional imagery when lacking a historic image (Singer, 1966). All associated multisensory experiences in this regard are assembled in the minds of consumers to anchor the hedonic experience through an image conjured up by the mind (Hirschman & Holbrook, 1982). Since hedonic consumption also involves a strong emotive arousal accompanied with the experience and its imagery, this signifies a psychological and physiological reaction, making the consumer want to associate him/herself with the image, along with what it represents in terms of product purchase and consumption rituals (McCracken, 1990).

Seeking out highly emotive experiences is a central tenet of hedonic products, and the desire for this varies with personal preferences, motivation and level of involvement. The goals of consumption help to better understand the differing ways through which individuals construe these experiences along a spectrum.

1.1.2 Goal-based perspective

One of the more commonly used approaches in marketing is the product-based approach, wherein specific product categories are explicitly classified as decadent vices or necessary virtues (Strahilevitz & Myers, 1998; Wertenbroch, 1998). However the lines are blurred when a product's desire increases over time with a decreasing sense of pleasure; in much the same way as consumption rituals would be a fuzzy distinction between toil and pleasure concerning yard work, physical activities (Crossen, 2006; Linden, 2012).

Arising from this product based-approach, a goal-based perspective alighting the pursuit of hedonic or utilitarian objectives (Batra & Ahtola, 1991; Dhar & Wertenbroch, 2000; Voss et al., 2003) would be more accurate. This is helpful in: 1) regarding hedonic consumption as driven by individuals, shining light on consumer idiosyncrasies than a product's inherent qualities and 2) clearing the debate on product-relevant hedonic and utilitarian attributes (Alba & Williams, 2013). However, many consumption products represent a mix of utilitarian and hedonic motives, making it indistinguishable to set the boundaries between the two inasmuch as considering the individual goals pursued. For instance, a work laptop used for official meetings and streaming Netflix, a smartphone to reply to emails and listen to music. In such cases, identifying the source of pleasure through a means-end distinction can certainly help,

wherein pleasure and pain are hardly distinguishable, such as the pleasure from post-exercise bodily pain.

Another way to consider is looking at individual motivations for consumption. The motivation-based perspective helps to clarify individual-level differences for the same or different products. Taking the example of morning coffee, one person might feel energized with the aroma of coffee while another could drink it to avoid a headache. This is also the case of two individuals willingly watching movies filled with gore, sadness or fear for different reasons of excitement, escapism, confrontation or fearful sensations (Andrade & Cohen, 2007; Freud, 1955; Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982). Similarly, certain activities which are generally considered to be hedonic vices could seem to be necessary virtues, such as self-medicated use of antidepressants to induce sleep or avoid stress, in a similar way as being addicted to sustained exercise to the point of self-inflicted muscular pain (Alba & Williams, 2013; Linden, 2012). In all of these, it is essential to identify the motives that lead individuals to pursue something rather than the anticipated result, which are influenced as well by the ways of thinking and thought processes as demarcated through the theory of psychological distance (Nira Liberman et al., 2007; Trope & Liberman, 2010).

1.2 *Psychological Distance*

Psychological distance, which falls broadly within the construal level theory, pertains to the way individuals conceptualize events, people, objects, experiences based on certain dimensions, in relation with the subjective experience of reality rather than the objective question of existential reality (Nira Liberman et al., 2007). Psychological distance concerns all things which are not a part of the present reality and do not pertain to the current time (referred to as the "here and now"). Since the "here and now" is the most recent and clear memory for the mind, it is affiliated with richer and more concrete details.

There can be different reasons that lead to perceptions of not being in the present reality. Events that are far from the present time, for instance half an hour ago versus one week ago, or this evening as compared to this time next year, are conceptualized differently in terms of time by the mind (Förster et al., 2004). Locations that are spatially distal from the current position could also be perceived by the mind as being far such as home or place of work compared to visiting another city or country. There also exists a difference when thinking of loved ones, family, and neighbors against meeting people in a first encounter and persons from different cultures or countries as for the self. In terms of reality, alternate versions of events or hypothetical situations would be considered distant such as having been born in a different continent, developing a different skill or speaking a different language than the one currently acquired, imagining life on Mars, having had the ability to fly or travel across time.

These alternate constructions to proximal reality construe four levels of psychological distance namely temporal, spatial, social and hypothetical distance. In the preceding examples, the first set of situations in each context respectively pertain to the proximal reality while the others pertain to a distal reality. The unifying theme amongst all these is that they are all imagined from the origin of zero distance with respect to the present time, place, self and reality, derived from the direct experience for the individual in the here and now. All situations which are not exactly placed within this same context or are farther would be termed as psychologically distant and would require mental reconstruction (Nira Liberman et al., 2007).

Based on this, there exist two distinct categories: low-level construals for proximal experiences relying more on subordinate investigation and the details pertaining to an event, and high-level construals relying on superordinate characteristics by asking 'why' questions of causality for distal experiences. According to Liberman, Trope, & Wakslak (2007), psychological distance and construal level go hand-in-hand. Events or experiences that are at a

greater psychological distance from the current reality and present time will be construed at higher, more abstract construals while events which are more proximal to reality and the present time would be construed at lower, concrete construals.

1.2.1 Psychological distancing for hedonic consumption

According to Hirschman & Holbrook (1982), there is evidence that suggests consumers sometimes indulge in an imaginative role distant from reality and proximal to their desires. There have been studies which show that consumers imagine themselves as actors within a movie, play, performance or even pornography in order to visualize their desires (Greene, 1981; Hirschman, 1982). Such events and experiences have been denominated as “absorbing experiences” because of their capacity to engage the consumer (Swanson, 1978), or “extraordinary experiences” attributing to their consecrated nature, a communal feeling and transcendence (Tumbat & Belk, 2011).

However, another stream of literature suggests that, affective feelings are stronger for judgments of events occurring in the present than those distant from current reality, either in the future or the past (Chang & Tuan Pham, 2013). However, there is a certain confounding of effects concerning the antecedents. The present moment can often lead to a stronger feeling of emotions, such as fear or adrenaline rush before going on stage, regret arising from time wasted or not well spent just after a long break, or shame from an embarrassing moment in front of friends. Nonetheless, a strong affective feeling is also present where outcomes have already passed or will come to be in future, such as nostalgia for a graduation years ago or joy for an upcoming Christmas family dinner.

Of the many decisions that are encountered in the face of hedonism, some include enjoying a dessert such as cake or ice cream; drinking alcoholic beverages such as wine; spending excessively on luxurious products such as handbags, watches, cruise trips; entertainment through video games or movies. As the purpose of this research was to uncover the motivation-based hedonic consumption rather than a product-based approach, a mixed-method data collection approach was preferred.

3. Methodology

In accordance with the research objectives to understand the varying motivations for decision-making in terms of hedonic and utilitarian attributes of consumption (see *Introduction*), it was deemed necessary to opt for an innovative approach which allowed mental projection and empirical analysis simultaneously. As reinstated in the section “Indulging in Hedonism”, true hedonic consumption lacks a concise and complete definition, leading to multiple attempts on food choices and musical pieces as hedonic consumption while ignoring vacations, traveling, cars and gadgets (Alba & Williams, 2013; Arnold & Reynolds, 2012; Kahn et al., 1997; Lacher, 1989). Insomuch as research on contemporary consumer behavior is concerned, the current method aims to enrich existing consumer research by expanding the horizons of hedonic consumption in line with its envisioned definition of “multisensory images, fantasies and emotional arousal in using products” (Hirschman & Holbrook, 1982).

A projective method coupled with the INDSCAL approach was applied to discover consumers’ unconscious opinions and to acquire richer, more informed responses than direct qualitative methods (Malhotra, 2008), helping to gauge a nuanced understanding of the psychological proximities that consumers perceive for hedonic products. This technique, first proposed by Vernet (2007) called the Album On-Line (AOL) approach, allows assessing participants’ elicitation through a set of images based on four steps (Kessous, Valette-Florence, & De Barnier, 2017). It starts with asking participants to search for five images based on their

thoughts in relation to psychological distance and hedonic consumption to produce personal albums, providing keywords and narratives recounting their history with the product, brand environment and an experience, all of which is summed up in their chosen image. The next step involves a combination of all individual albums by the researcher to produce a collective album for the group, which is voted on by all respondents if they wish to retain or modify their first album. The third stage involves resending the final collective album after the voting phase, containing pictures that have been selected and agreed upon by multiple participants, back to the group, to evaluate their concordance with the selected images which would comprise the final group album. The final step involves an INDSCAL analysis of the final images selected and voted on by participants, through a graphical representation of these points on a two dimensional geometric space, also referred to sometimes as perceptual maps, with the axes representing consumer preferences or perceptions (Malhotra, 2015). The usual group size for Album On-Line constitutes 6-12 persons of mixed gender (Fern, 1982). The research design combines the advantages of an in-depth approach, such as interviews or focus group with open interaction and input from participants, with that of a projective method. The process culminates in a graphical representation of the

The methodology consisted of two diffusions of the study in France (French version) and the UK (English version), to check for possible language effects as well. The two different manipulation sets (affective, cognitive) tested on two different language-based cultures allowed a 2 (language: English v French) x 2 (condition: affective v cognitive) experimental design. **Table 1** contains the textual manipulations employed for the first round of the AOL in English. For the second round, participants in the cognitive (affective) condition were asked to think of "*the most concrete (evocative) and representative judgments (sensations) and evaluations (emotions) perceived (felt) towards a product that regularly helps you (a symbolic product)*" concerning a "*proximal (distant) and useful (symbolic) product*". This is line with the construal of emotions at a greater psychological distance and cognition at greater proximities (low distance) and the impact of simultaneous psychological distancing (Chandran & Menon, 2004; Huang et al., 2016; Kim et al., 2008; Kross et al., 2005; Wakslak et al., 2008). The aim was to ask respondents about their consumption of hedonic products, the perception of psychological proximities with these products and efforts undertaken to enhance/reduce their distance with these products.

Native language speakers translated and back translated both the English and French versions at each step. The exploratory method, launched through the Prolific platform, allowed a first-hand identification of different indulgent products and hedonic brands as considered by four sets of consumers, their individual consumption motivations, along with the construction of a narrative. Each of the four conditions included around 10 participants on average, after accounting for churn through the four stages. Data collection lasted during the months of May and June 2019. Based on this, an INDSCAL analysis led to a two-dimensional frame for affective and cognitive motives for hedonic consumption, as represented in **Figure 1** for one of the four conditions.

Affective	Think about a product that you purchased within the last year. You had been dreaming of owning this product for a long time, as it is something that defines who you are and who you want to be. You could not hold yourself back from acquiring it, and expended a substantial amount of effort and resources to obtain this product. It is a symbolic acquisition for you and is not commonly used by your social circle.
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Cognitive	Think about a product that you bought recently within the last month. You had planned this purchase in advance, finding the closest place from where you could buy it at the lowest price. You felt the urge to obtain this product, as it fulfills your needs very well. The product aids your daily tasks through its added efficacy and practicality. It is commonly used by your loved ones and complements your routine activities.
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Table 1: Manipulation for English AOL condition

4. Results and Discussion

The INDSCAL model was run on SPSS v25, which calculated the Euclidean distances between points along a matrix, with vectors representing the distances between the images and keywords as chosen by respondents. Data from participants' agreement with final choice of images and keywords for the final group album was entered into SPSS and subjected to the ALSCAL command. The final output of the ALSCAL command produced a 2-dimensional chart as shown in **Figure 1** for one of the four conditions.

The results from the current study revealed an interesting mix across the two datasets. with the French respondents mainly choosing a mix of technological advancements and gadgets, fast fashion as cognitive motivations for proximal consumption. For hedonic consumption, there was a mix of landmark life events, futuristic and collaborative products, and themes of solitude. The English version had a thin divide between affective and cognitive motivations for consumption, which could be explained by usage of similar thoughts/words across emotional and practical reasoning in English, leading to a distinction based mainly on gestures or expressions than words. For instance, themes of well-being, cleanliness products and nutrition appeared frequently across affective and cognitive conditions. In the affective condition, social networks, and products on creativity, traveling featured more often for the distal condition; the cognitive condition included automobiles, price consciousness, electronic gadgets and music as examples for proximal condition.

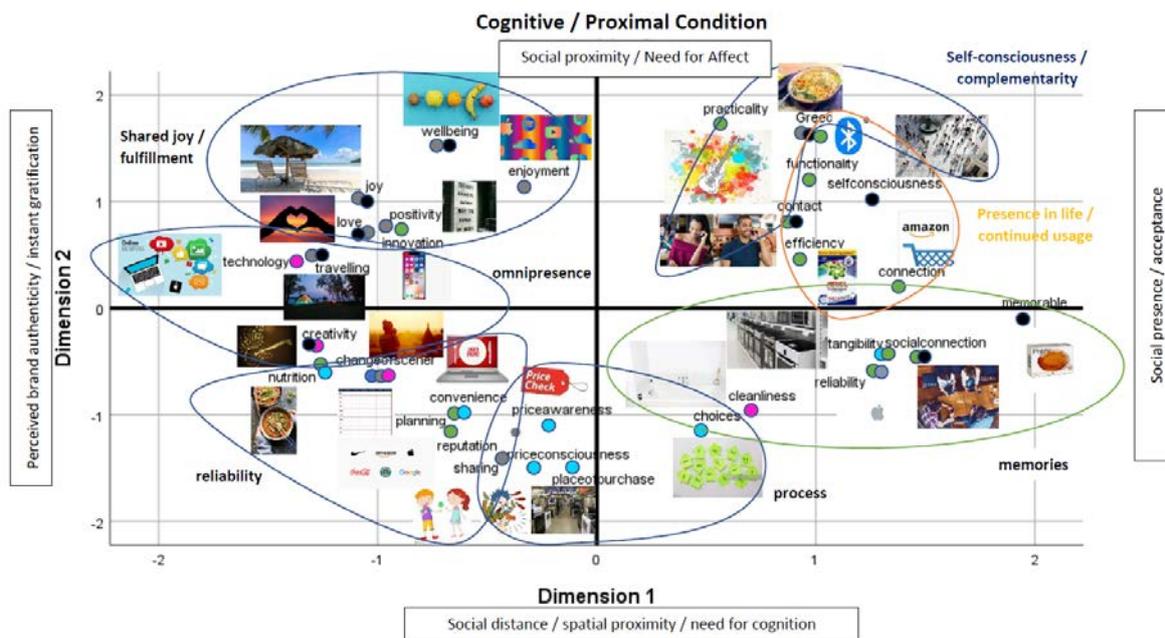


Figure 1: Results from cognitive AOL (English)

5. Implications for Theory and Practice

Consumers employ a variety of ways to stay close to objects and experiences which lend greater hedonic feeling to the self, and distance themselves from objects and experiences which hinder the pursuit of pleasure (Belk, 1988; Chang & Tuan Pham, 2013; Englis & Solomon, 1995; Levy, 1959; Trope & Liberman, 2003, 2010). The current research proposes that individuals' perception of their psychological distances with individual objects in life is crucial in understanding their relations with indulgent behaviors in consumption contexts (Huang et al., 2016; Kim et al., 2008).

The spatial distance between marketers and their consumers has increased substantially with the advent of digital and information age, however results show that the current social networks are a way of affective conditioning. Several businesses are targeting consumers online or through social media, and there is a great need to understand consumers' processing of experiences through their trajectories, employing them in campaigns which can resonate well with consumers locally as well as globally. A better understanding of the psychological process for consumption across different languages/cultures would help not only in the better promotion of products but could also serve as a useful tool in designing products serving consumer wants.

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Individual level of the business tourism: different perceptions of the people involved in the industry

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Abstract:

Before the pandemic COVID-19 business tourism was characterised with increase and high competition among destination for the opportunity to organise an event. As a result, quality changes and new participants have appeared on the demand side of business tourism and new event types (digital or hybrid meetings) on the supplier side. Although it is called MICE tourism in the segment in academic literature, there is no consensus in naming the branch. The aim of this study is to present a systematic review of the current international terminology of business tourism and the process of choosing destinations from event organiser aspect.

Keywords: *MICE tourism, Meetings Industry, destination selection criteria*

1. Introduction of Paper

The topic of this paper is business tourism which is among the first industries drastically affected by the globally spread Coronavirus. Although the research does not focus these impacts, it is inevitable to mention it, since the experiences gained during this period will influence the new direction in the reset phase, of which business tourism is not an exception either. Before the worldwide epidemic the professional statistics and figures and researches (WTTC, UNWTO) were about the global prosperity of the branch, since in 2017 in Europe the spending from leisure tourism – generated by inland tourists together with ones from other countries – gave 77,8% of direct touristic GDP and spending from business tourism meant 22,2%. In 2018 according to the expectations they increased by 3,4%, however by 2028 it will have raised by 2,3% and reached 480,3 million USD (WTTC, 2018) Not only its contribution increased, but international arrivals too (the number of the tourists who spent at least five days in one destination). In 2019 world tourism reached 1.5 billion arrivals which meant 60% increase within 10 years in 2009 892 million arrivals were registered worldwide) (UNWTO, 2020). Analysing the aim of the visits, business tourism took 19% while holidays, recreations and other leisure tourism forms took more than half (56%) of the arrivals. Travels for other reasons such as visiting friends or family – also known as VER standing for visiting friends and relatives in international academic literature (Jackson, 1990) – for religious reasons, and for health care reasons took 27%. The visits without specific aims took 4% (UNWTO).

Realising the positive potential in business tourism, destinations started to open to this segment and invest resources in it. The quick development of infrastructure results in high competition for market shares among the destination. Understanding the key factors of choosing venues of business meetings, conferences and incentive trips by the organisers can mean competitive advantages for certain destinations. One of the consequences of the current situation is that online events are spreading. Although their realization still needs as much professional expertise as in case of traditional business tourism, it requires different skills and resources from a certain point of view. According to a moderate forecast the market of association conferences are not affected by the pandemic as much as the one of the corporate meetings, since the arrangements of conferences and congresses rotating int he world, organised regularly and are with high participant number starts 3-4 years before the events.

2. Theoretical Background

2.1. Terminological evolution of business tourism

According to the basic theory of tourism (Swarbrooke & Horner, 2001) the segmentation of the touristic market is based on the needs and the satisfying of requirements form the demand side which takes travel aims, motivations and methods of payment into consideration. From them one can differentiate the following categories: leisure travel (private tourism market) and business travel (business tourism market) (Davidson & Cope, 2003). A conception of business travel and business tourism appear in several contexts of academic literature, however according to Davidson and Cope (2003), in classical rule of three, namely tourism needs time, money and motivation, business tourism means those travels in which everything is related to work. So, the travels take place in working hours on the employers' expenses and interest are indicated as business tourism (Newstrom & Scannell, 1998). In secondary resources dealing with this segment we can meet more and more definitions of these fields.

Nowadays the branch is not only referred to be business tourism but new concepts such as MICE tourism (Meetings, Incentives, Conferences and Conventions, Exhibitions), Meetings Industry (MI), MCCI (Meetings, Congresses, Conventions and Incentives) Industry, MECE (Meetings, Events, Conventions, Exhibitions), MCE (Meetings, Conventions, Exhibitions), CEMI (Conventions, Exhibitions, Meetings, Incentives) or MC & IT (Meetings, Conventions & Incentive Travel) can be found in academic writings and literature (Swarbrooke & Horner, 2001; Weber & Chon, 2002; Davidson & Cope, 2003; Swarbrooke & Horner, 2007; Rogers, 2008; Happ, 2015; Getz & Page, 2016a; UNWTO, 2019).

Differences in definitions can be experienced in geographical placement. The widely accepted MICE tourism is mainly used in regions where the tourism industry is fast growing such as India, China and the Near East (Israel, UAE), in Southeast-Asian countries (Thailand, Malaysia and Singapore). It is also popular in Central and Eastern Europe, and favourably mentioned as a professional definition in the Visegrad Four (i.e. Czechia, Poland, Hungary, Slovakia), and also in the touristic terminology of Slovenia and Croatia. Business tourism is the most accepted expression in interdisciplinary researches of tourism, and it is originated from North America. Although in the USA, business/work and tourism are opposite of each other, the North American academic literature connected these words and refers to the branch as business tourism (Swarbrooke & Horner, 2001; Weber & Chon, 2002; Davidson & Cope, 2003). The expression of Meetings Industry (MI) was officially introduced in the academic literature in 2006 (UNWTO, 2006; Rogers, 2008). The MI concept expands the definition of MICE tourism and includes those activities that deal with the organization, promotion, sales and hosting of business events. MI is mainly used in Western European countries (e.g. UK, Germany, the Netherlands, Austria). Business events as an alternative expression is spread in Australia and Canada, the scope and tasks of which is determined by the academic literature the similar way to other events (e.g. cultural, social, sporting events).

As a consequence, a single definition does not exist to refer to the segment, yet in the international academic literature MICE tourism is the most accepted one (Cieslikowski, 2015). The definition of MICE tourism is a mosaic word which stands for the above-mentioned English words (Meetings, Incentives, Conferences and Conventions, Exhibitions). The new trend on the market of MICE tourism is that the role of unique and new destinations is developed which has generated changes after a period of cooperating with the several-time chosen Western European cities. This new interest is mainly highlighted with conference groups (ICCA, 2018). Mainly, the organizers seek for programs providing unique experience for groups with high number of participants, high cost and one week stay. According to the current trends not only capitals are popular but those destinations on countryside within short trip reach from the hotels of the capitals (UIA, 2018).

2.2. The characteristics of the components of business tourism

The first letter of MICE tourism stands for *Meetings*, that is to say business trips, negotiations which contain corporate organising and planning elements with limited incentives. The aim of the corporate meetings with minimum 10 participants is to discuss certain topics or execute certain actions in permanent venues or on regular basis (Trišić & Arsenov-Bojović, 2018). There is no exhibition connecting to the event. They tend to be on high level with prestige values which directly contribute to the positive image communication of the company. The segment is highly sensitive to exterior and interior changes and reacts dynamically (for instance economic recession in 2008, world political factors, pandemic COVID-19), besides that the developong industry also has influence on the segment. Security assessment also plays important role in choosing the venue alongside with the presence of employees in the given region.

Incentives are usually for employees with good results (usually sales representatives, distributors) or partners who also provide excellent performances. This segment is very profitable for the destinations, since in this case the tendency on expenditure is the highest. Generally, we can say that number of participants is high whose entertainment is provided by expensive programmes. From the destinations' point of view the emphasis is on the attraction and the offer of the hotels, while the conference rooms are in the background (usually the meetings take no longer than half day). With the evolvement of medical business trips, transparency became highlighted, education was in focus. These changes relocate incentive trips from holiday resorts into 'city break' destinations, since they possess enough infrastructural backgrounds to include corporate elements in incentive trips. In many cases business elements are included such as in for of strategic discussions (Rogers, 2008). Parallely, elements of social and corporate awareness also appear.

Conferences and congresses in MICE are usually organised upon the order of associations, the aim of which is to provide common platforms to discuss certain topics, to share knowledge, to consult and solve issues on academic, sport and cultural fields (Trišić & Arsenov-Bojović, 2018). The clients can be any legal entities such as foundations, state organisations, or any other for-profit organisations. The associations are usually non-profit organisations which are engaged to education, industry development and any academic fields or governmental lobbies. Their conferences are mainly high cost with high number of staying and expenditure. The participants are generally from other countries, so these conferences can generate economical profits for the chosen destination (Crouch & Weber, 2002). They are considered to be one of the most predictable segments, since it mostly resists global events and economical changes.

Exhibitions are B2B and B2C events where products and services are presented. Trade exhibitions generally called trade fair or expos are usually arranged by organisations or industrial participants with unique interest whose aim is to present their new products or services, to study the actions of competitors, to examine current trends and possibilities. (Trišić & Arsenov-Bojović, 2018). Some of them are open for public, while some are exclusively for representatives of the corporation and media. These events can stimulate as many as, or ten thousand visitors, they are usually organised yearly and belong to business tourism. It may also have economic impact on the destination, since they are cost effective and serve as a platform for clients and partners to meet personally and stimulate business among them.

3. Characteristics of Business Tourists

While target audience of leisure tourism is determined as individuals, the participants are leisure tourists, MICE Industry focuses on companies, organizations and associations, the participants are business tourists. It is important to be aware that sales channels are also different between leisure and business tourism. In case of incoming leisure tourism tour operators, travel agencies, personal travel advisors, online pages are on stage, while in case of business tourism business tour operators, Destination Management Companies (DMCs), incentive agencies, Professional Congress Organizers (PCOs), Event Management Companies (EMCs), exhibition and event organizer companies, business travel agencies, convention bureaux and Destination Marketing Organizations (DMOs) are the participants (Swarbrooke & Horner, 2001).

Differences can be experienced between required services. Both in leisure and business tourism competitive accommodation and infrastructure play an important role, however in the case of leisure tourism, touristic attractions, sightseeing, boat tours, restaurants and shopping facilities appear as important decision factors. For business tourists, competitive venues, unique event venues, high quality of catering and entertainment are essential criteria (Boniface & Cooper, 2005).

In the decision-making of choosing a destination, regarding business tourists, the primary decision factors are the appropriate infrastructure and capacity and opportunities professional development (Rogers, 2008). In the case of leisure tourists, the exploration of the destination and relaxation are a determining motivation of destination choice (McNicoll, 2004). One of the main benefits of business tourism is that the events are easily organized on long term since outstanding conferences and exhibitions, trade fairs, incentive trips with high number are booked 3-4 years in advance by the organizers (Allied Market Research, 2016). Nevertheless, at smaller scale corporate meetings the trend is the booking periods are getting shorter and the leading date is closer to the date of arrival (UNWTO, 2018) making the aforementioned advantages of business tourism more relative (Oršič & Bregar, 2015; Millán, Fanjul & Moital, 2016).

Business tourism is not only the driver of the touristic sector, but it is also the one of the engines of the other branches, since the conference guests are leading representatives of their own field who can lead their branches to the prosperity with their innovative ideas (Davidson & Cope, 2003). When introducing the advantages of business tourism, it is important to mention the re-visit intention of the conference guests as leisure tourists. This effect is, however, out of the scope of the present study. An outstanding conference increases the awareness and reputation of the hosting town with which contributes to the positive strengthening of its image and by its multiplier effect it can contribute to economic development (Marques & Santos, 2016; Getz & Page, 2016b).

4. New Trend: Bleisure Tourism

Bleisure is the merging of business and leisure tourism and is an observably spreading phenomenon. It is a new trend which influences both segments of tourism – leisure and business tourism – furthermore the members of demand and supply side. In recent years, according to Lichy and McLeay (2018) the popularity of bleisure tourism - the fusion of business and leisure tourism - has been spreading bleisure tourists complete or finish their business trips with leisure activities, so the borders leisure and business tourism is slurring. The concept of bleisure traveller is determined as follows: those professionals who avoid the trap of sacrificing everything to work and leaving nothing to entertainment, by including leisure activities within their business trip (Bridge Street Global Hospitality, 2014; WEF, 2015).

Although in the age of time management, according to the statistics of World Economic Forum (WEF) in 2018, the number of travellers in bleisure tourism who connect work with leisure activities is constantly growing, this hybrid type of travels is less researched academic field. Since the phenomenon is inevitable for those who research in business tourism, I try to involve examining common fields of business and bleisure tourism into my primer research. There are some studies which completely focus on bleisure or business trips, besides them in some articles there are references on it which deal with the circumstances and physical requirements of the events (Gustafson 2014), on gaining experiences on business trips (Unger, Uriely, & Fuchs, 2016), activities during the business trips (Smith & Carmichael, 2007) or the working tourists (Uriely & Reichel, 2000; Cohen, 2011). Researches in their academic work deal with the border disciplines of bleisure tourism, such as stress, tension, work-family balance (Westman, Etzion & Gattenio, 2008), accommodation choice of business tourists (Sammons, More, Benson & Demicco, 1999) and with the fact that business tourists return as leisure tourists later (Kerr, Cliff, & Dolnicar, 2012)- however they are different from types of bleisure tourism. The border between business and leisure trips is more and more nuanced since more and more people look for professions with travel opportunities. The number of business tourists is growing year by year and it can be experienced that more and more participants lengthen

their trips in order to enjoy the leisure facilities of the given destination. Currently this rate is approximately 60% of business tourists (Expedia Group Media Solutions, 2018) and the number of those ones who take time on leisure facilities in a business trip. According to Expedia Group Media Solutions (2018) the following factors are determining in bleisure tourism: Exceptional and unique programme opportunities (48%), Must-visit locations (43%), Accessibility within the city (38%), The length of the journey (37%), Proximity of weekend to the business trip (37%), Extra costs (37%), Good recreation facilities (34%), Join of friends and family (32%).

The new trend offers new opportunities to local suppliers since bleisure tourists are usually already experienced travellers. Both groups (business and bleisure tourists) possess travelling habits that differ from the ones of average tourists. They look for precious, authentic, unique and personalized leisure facilities in the given region. As a result, event and conference organizers try to find an attractive venue to the requirements since a destination with a positive image can contribute to increase the number of business events in the hosting area.

5. The process of choosing destinations from event organiser aspect

Tourism happens in space, the venues are destinations with complex features (Howie, 2003). The destination is defined by its touristic offers, the choice of services fusion of favourable geographical area in academic literature, which factors attract tourists to the destinations and meet the demand through a complex experience offer (Gunn, 1994; Leiper, 1995; Buhalis, 2000; Kozak & Baloglu, 2011; Durasevic, 2015). In our globalised world not only the conditions of leisure tourism are becoming easier, but the ones of business tourism, too. As a result, there is a high competition between destinations in order to get on the mental map of decision-makers (in case of leisure tourism the tourists themselves, in case of business tourism the final client such as an association, a firm, the assistants of company leaders. Destinations offer more variable products and services to the visitors in order to provide unique experiences to make the visit memorable.

Business tourism covers the tourists from other types of tourism who look for and require high level services and tend to spend most per head due to the contribution of the company they represent (Dwyer, 2002; Wan, 2011). More and more destination recognise the potential in the competition, so the sector influences the offer of the destinations (Gustafson, 2012; Smith & Garnham, 2006). Weber and Ladkin in their academic research (2004; 2009) explore and acquaint a new trend which affects the congress industry: from governmental side there is a higher and higher interest due to its economic profit. The reviews present the conference tourism (Yoo & Weber, 2005; Mair, 2012), and touristic researches of congress and negotiation management (Lee & Back, 2005). Mair (2012) reviewed 144 articles from the academic literature which were written between 2000 and 2009 and mainly published in Journal of Convention and Event Tourism.

The researches according to thematic deal with event organisers, the technology. the estimation of economic influences, the assessment of questionnaires, the process the destination choice, the role of the image of the destination influencing destination choice (Jin & Weber, 2013), however none of the researches continued with the harmonisation of the results and the demand side, so as to building requirements in the prices of destination choice of the final clients (individuals, corporations, associations). It is a general trend that on the market of MICE tourism the role of the new and fresh destinations are valorised during the process of destination choice, which has brought changes to the offices working in international stages and also to the associations after the several times tried significant West-European cities.

This new trend is highly visible in case of conference groups (ICCA, 2018). Primarily the organisers seek for venues offering special and unique experiences for groups with a lot of members and high expenditure. and in lot of the cases with up to one week long staying. According to the trends we can say that nowadays not only capitals are popular, but basically those destinations which are a day trip from the capital and reachable with short travel from the hotel (UIA, 2018). The study of Marais, Du Plessis and Saayman (2017) gives a complex table on how to determine the key factors of business tourism using and analysing the seconder sources in the topic published from 1985 to 2015. As a result of overviewing the academic literature and the qualitative research shown in the study, four key factors are having been determined by the authors which can make the destination of business tourism successful: 1. finance, 2. human resource, 3. the product, 4. customer-oriented approach. Other studies (Crouch & Louviere, 2004; Boniface & Cooper, 2005) putting the aspect of event organisers forward consider the following elements the most important factors of choosing the destination: 1. location, 2. safety, 3. air travel, 4. accessibility, 5. cost, 6. the attraction of the destinations, and 7. the quality and hospitality of service providers. It is worth according the factors from demand and offer side, since it is very important to know how diverse these factors from demand side (final clients, conference and congress organisers) and from offer side (congress venues among others, special gala dinners, restaurants) are, since in most of the researches above the answers from demand and offer side are analysed together.

6. Summary, Limitations and Further Research Avenues

In the study the terminology of business tourism has been presented from which it is visible that a common agreement does not exist in the naming of the sector. According to the UNWTO (2019), the branch is called Meetings Industry. Based on its definition the trip has business and professional aims which can be divided into further motivations such as a participating in corporate meetings, conferences or conventions, trade fairs and exhibitions and other business and professional aims. The 'Meetings Industry' expression is used by most of the international business tourism associations (Meeting Professionals International (MPI), International Congress and Convention Association (ICCA), the Reeds Travel Exhibitions and the World Tourism Organization (UNWTO)) instead of the MICE mosaic word. Although MICE does not acknowledge the industrial features of business events it is still, due to the lack of a commonly accepted definition, the most popular and used in tourism. In the four subsegments that MICE stands for, the aim of the travellers is business and professional, however all the four have different features. The focus of the research in the study deals with conference tourism since it is exclusively B2B form as opposed the other three subsegments in case of which B2B and B2C are hardly isolated.

In the case of business tourism, being aware of the primary factors of choosing destinations is important, as paying attention to them and with upgrading their level the image of the destination can be made more appealing and as a result this image can contribute to the growing number of conferences on the given hosting country. The key factors of choosing a destination is known from the organizers' side, however, from the participants' side – we are hardly informed what they mean by the system of this kind of tourism and by the particularity of the destination. As a result, it would be essential to set up a scientific gap research on the individual level, in other words within conference tourists. Tourism takes place in the physical environment (Butler, 1980). As such, it is imperative to set geographical boundaries to a such study. For the sake of the present research, the sample would be composed of international conference tourists arriving in Budapest. Because of the nature of the study, a nonprobability sampling will be used. In order to answer the research questions, it is worth conducting a survey

in several conferences with a high number of participants in Budapest. The aim of the quantitative research is to examine the key factors of conference tourism and its attendance, focusing on the destination from the visitors' point of view. Before the questionnaire semi-structured interviews will be used because of the deeper understanding of the topic. Semi-structured interview is useful for investigating complex behaviours, opinions, emotions and affects, and for collecting a diversity of experiences. This method does not offer me a route to 'the truth' but it gives a route to partial insights into what people do and think (Longhurst, 2016).

Revealing all these factors can contribute to a better understanding of the demand side and being aware of them may provide a guide on how to harmonise the offer and demand side of conference tourism. Besides Budapest as a destination, the model set up from the research results can assist in forecasting the future of destinations involved in international conference tourism.

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Brand representation and symbolism understanding – perceived differences among young consumers

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Abstract:

The purpose of the paper is to understand whether children of different ethnicity, age and gender relate to brand logos in different ways in term of brand representation and brand symbolism. Children begin to understand symbolic aspects of consumption at early age, enhancing the importance to observe and explain certain pattern of behavior in very young children. The paper extends existing research by including more diverse sample of children with different ethnic background and the research was administered across three testing sessions, assessing level of brand representation and symbolism in children aged 3 to 5 years. The findings indicated that brand representation and understanding brand symbolism commences at an early age. Differences in the perceptions among children with different demographic characteristic were identified, with potential implication on the effects of branding.

Keywords: *brand symbolism, young children, brand representation*

1. Introduction

Understanding children's consumer behavior is an important part that has an influence on consumption choices. Evolutionary patterns of the cognitive processes among young children demonstrate their capacities to recognize brands as a prerequisite in forming impressions of other people based on possessed brands. Currently, there is evidence that children have ability to recognize brand at early age as integral part of their life in preoperational stage (Aktas Arnas, 2016; Valkenburg and Buijzen, 2005; Bruce & Hill, 1998; Mizerski, 1995).

According to most eminent theories regarding cognitive development in children, Piaget's theory, children from about two to seven years old are not able to think how people differ and do not demonstrate skill for more complex and abstract judgments (Piaget, 1970). Consequently, young children at the preoperational stage rely on observable aspects of their environment, such as concrete perceptual features, whereas abstract thinking will be more dominant for the older children in the concrete operational stage. Younger children primarily are more familiar to brands on a perceptual level, serving as a cue for products. The importance of brands has been increased at the moment when children employ more complex cognitive abilities to evaluate not just particular physical attributes, but moreover imaginary brand characteristics. Contrary to Piagetian theory, other papers demonstrate the capabilities of young children to understand brand symbolism. Bachmann and Roedder (2003) found that young children are able to associate certain images or personality characteristics of consumers owning a particular brand. Young children three to five years old understand brand symbolism and attach certain brands to user relate imagery such as popularity and happiness (McAlister and Cornwell, 2010).

So far, most studies conducted on brand recognition and brand symbolism have been focused on children from one ethnicity group. Several papers demonstrate the need of extending the children brands research by implementing more diverse sample with children from different ethnicity groups (Kellershohn, Walley, & Vriesekoop, 2018; Hemar-Nicolas, Gollety, Damay, & Ezan, 2015; McAlister & Cornwell, 2010; Nairn, Griffin, & Wicks, 2008; Bruce & Hill, 1998). The Piagetian model has the main focus on the chronological age of children and therefore excludes other non-age-related factors such as gender, ethnicity and social class which are likely to have an impact on children brand symbolism (Nairn, Griffin, & Wicks, 2008). Bruce and Hill, (1998) emphasize the need for a future empirical study to engage larger and more diverse samples of children in order to detect similarities and differences. Hemar-Nicolas, Gollety, Damay, and Ezan, (2015) suggest to expand their study with children from different cultural backgrounds.

The present study is designed to redress this limitation by including children with different ethnic background. The children investigated in this study were within the stage of development (ages 3-5) defined by Piaget as preoperational in order to determine if young children from two ethnicity groups are able to recognize the social implications of consumption choices. In this context, our research purpose is to provide a valuable contribution to this topic issue by extending the sample with children from different ethnicity groups.

Younger children demonstrate little evidence of understanding brand symbolic aspects of consumption. Our findings will contribute to this stream of research by examining the age at which children hold mental representation abilities and understand brands' symbolism and the potential existence of differences among ethnicities. It was hypothesized that children's ability for brand representation and understanding of brands as symbols will differ among children with different nationalities, age and gender. In this study, abilities to recognize the symbolic meanings of brands were examined among children with different demographic characteristics.

2. Literature Review - Understanding of Children Brand Recognition and Brand Symbolism

Child's cognitive development determines the ability of children to recognize, group and to form opinions about others based on their choices of preferred consumption brands. Young children are immersed in brandscape and exhibit great knowledge of certain brands, but the cognitive developmental stages of young consumers restrict their ability to develop more abstract relationships in their environments. The most insightful investigations on children's understanding of brands have been conducted by Piagetian psychological theory of cognitive development, (Piaget, 1970; 1960). Piaget's cognitive developmental stage theory support the expectation that children ability for consumption symbolism is increasing as they grow older.

Most children aged 3-5-years are not able to read, but still, they can recognize certain logos. The recognition of brand logos can serve as a perceptual cue that identifies a product and might influence on developing loyalty to certain products, too. Significant differences are evident in the cognitive abilities and resources available to children at these stages, and characteristics of each stage are essential for brands' persuasive intent to position certain products. Past research, consistent with the traditional theory of cognitive development, suggests that sophisticated symbolism understanding is absent until somewhere between 7 and 11 years (John, 1999).

Several surveys based on a qualitative methodology observed specific children's behavior related to brand recognition. The preschoolers have greater knowledge about the product categories compared to their skills to designate the actual names associated with the brand logos (Bruce and Hill, 1998). Fischer, Schwartz, Richards, Goldstein, and Rojas (1991) demonstrated that children had high recognition of the children's brand logos ranging from 91.7% for the Disney logo. They found that recognition level has been increased by age for each product categories. Valkenburg and Buijzen (2005) observed the ability of the brand recognition level among children with different demographic characteristics. According to the authors, the highest level of brand recognition occurred between 3 and 5 years old. The results did not demonstrate gender differences among children on the level of the individual brand logos. Contrary, boys and girls can clearly identify their predisposition and preferred brand choices of toy in different forms or categories (O'Cass and Clarke, 2002). Mizerski (1995) examined children three to six years of age and found increased ability for brand recognition through more developed cognitive and information processing abilities. Preschool children's recognition of symbols was best predicted by age and related to the frequency of media exposure (Derscheid, Kwon, & Fang, 1996).

Brand symbolism is defined as an understanding of the ways brand name symbolize user relate qualities. Consumers develop and communicate their identity to product related association and user related imagery such as popularity or happiness (Keller, 2016). Therefore, many brands are purchased for the desired image they convey rather than for the possessed functional attributes of products. Children at young age are aware that ownership of certain brands evokes an image of popularity, happiness...and understanding consumption symbolism, is an important aspect of children's socialization into the consumer world (Nairn, A., Griffin, C., & Wicks, P. G. 2008). Bachmann and Roedder (2003) express concern over the correlation between the brand consciousness of young children and its impact on the development of materialistic values in children. The authors support the organized initiatives that reduce the visibility of brands, and familiarity with brands especially among young children.

There is little research on the topic whether young children become mindful for symbolic meaning attached to certain products and brands. John's (1999) findings are consistent with Piagetian theory that children younger than seven years hold immature cognitive capacity, which

restricts any understanding of the intentions of others who might use brands for expressing individual purposes. Haynes, Burts, Dukes and Cloud (1993) suggest that children aged three to six had not possessed the perceptual skills needed for brand discrimination. Still limited researches have provided evidence that two to three-year old children construct narratives of identity around brands and perceive the importance of brand symbolism in their everyday social interactions. Findings expose that brand symbolism understanding starts as early as two years, and increases with age throughout the pre-school years. Children are more likely to prefer branded products if they are exposed to more television and have a less critical parental communication style (Watkins, Aitken, Thyne, Robertson, & Borzekowski, 2017). Initial studies concerning developmental recognition of children consumption symbolism among other age groups likewise include preschool children group. The results reveal the minimal level of the ability to recognize the social implications of consumption choices among preschoolers, their judgments about the owners of various houses and automobiles were essentially random. The questions were asked in personal interviews and the stimuli were presented as photographs, using only adult products. The gender differences regarding consumption symbolism were influenced by product class (Belk, Bahn, and Mayer, 1982). Consequently, the younger children would hold weaker consumption-based stereotypes compared to older children, but still, the owners of the brand products are perceived as more favorable than private brand owners. (Belk, Mayer, and Driscoll, 1984).

One of the first studies for understanding children brand symbolism found children as young as three had an emerging knowledge of brands that were relevant in their lives (McAlister and Cornwell, 2010). Theory of mind was employed to demonstrate significant association with preschoolers' understanding of brand symbolism. The results found that young children capable to think about mental state of others and to hold mental perspective skills, will better understand the use of brands for intentional self-expression. Young children with developed executive functioning manifest greater ability to process information about object and ability to form mental representation of brands. McAlister and Cornwell (2010) found that three years old children have the ability to think about brands in a symbolical manner. These researches are confronting Piagetian literature, which claimed that young children were cognitively unable to think about brands symbolically. How young children form brand associations and develop an understanding of brand symbolism has implications for their lifelong relationships to brands and material possession (Watkins, Aitken, Robertson, Thyne, & Williams, 2016).

Consequently, the research agenda of this study is assessing the understanding and potential differences of brand recognition, brand representation, and brand symbolism among children from different ethnicity, age and gender groups.

3. Methodology and Results - Brand Recognition, Brand Representation and Brand Symbolism Studies

We investigate whether children of different ages, gender, and ethnicity relate to brand logos and names in different ways in term of brand representation and brand symbolism. The participant sample comprised of 54 children. Data were collected from 29 preschool girls and 25 preschool boys from two different child-care center programs located in Skopje. The age distribution was 14 three-year-old, 21 four-year-old, and 18 five-year-old. Twenty respondents were Albanian, and 34 Macedonian children.

The present research is designed to measure brand recognition and representation among children aged 3 to 5 years following McAlister and Cornwell's (2010) classification, and the dependent variables for brand symbolism were developed according to Watkins et al. (2017)

measures. The initial empirical study was assessing levels of brand recognition in children aged 3 to 5 years from a wider variety of product categories. The stimulus brands were chosen based on the previous results elicited from the survey distributed among parents. Namely, parents should indicate the TV channels and brands that their children have been exposed to. The stimuli were 51 brands representing 7 product categories on the same size card (7X7cm.). In individual sessions to avoid over-stimulation, fifty-one logos were separately tested, and a child was asked what each brand logo cards stand for (scored as one, and if the child did not have any knowledge for the defined brand it was scored as zero).

Table 1 displays the children's average brand recognition rates. Within the children brands, average brand recognition is 54,87%, ranged from 26.32% to 89.47% individual recognition rate. Across product categories within children brands, average brand recognition ranged from 57.14% for food, to 57.41% for cartoons, to 61.48% for toys. The highest percentage for brand recognition among adult brands was evident for food and drink, 46.66%. Foreign brands have 46,18% average recognition rate, ranged from 14.71% to 70.59% individual recognition rate and it is higher than domestic brands with 26.80 average brand recognition rate, ranged from 0% to 64.71% individual recognition rate. Comparing children brands and adult brands, recognition rate is higher for children's brands ($n=54$, $M=54.87$, $SD=17.69$), than for brands 12+ ($n=54$, $M=35.91$, $SD=22.13$), a statistically significant difference of $t(106)=4.918$, $p=0.0005$. Comparing foreign and domestic brands, recognition is higher for foreign brands ($n=54$, $M=46.18$, $SD=14.32$), than for domestic brands ($n=54$, $M=26.80$, $SD=18.242$), a statistically significant difference of $t(100.122)=6.122$, $p=0.0005$.

Brand recognition	N	Mean	Std. Deviation	Minimum	Maximum
Children brands	54	54,87	17.696	26.32	89.47
Toys	54	61.48	27.97	0	100
Cartoons and TV channels	54	57.41	34.97	0	100
Food and drinks	54	57.14	20.01	14.29	100
Adult brands	54	35.91	22.134	5.56	83.33
Cars	54	22.68	20.181	0	75.00
Food and drinks	54	46.66	20.558	10.00	90.00
Mobile phones	54	40.74	42.419	0	100.00
Sport brands	54	37.96	41.133	0	100.00
Foreign brands	54	46.18	14.325	14.71	70.59
Domestic brands	54	26.80	18.342	0	64.71

Table 1. Percentage of brand recognition across brand and product categories

To test brand representation, eight brand logos with the highest scores were selected from brand recognition study. Each brand has its own compatible pair, and for each brand, there were five association picture cards. The child was presented with 15 associative picture cards (5 pictures were intentionally presenting

The purpose of the brand symbolism analysis was to observe the ability of children to think about the brand name at an abstract level, connecting the brand name to associations such as happiness, quality, popularity, and purchase intention. For the brand symbolism task, five pairs of equivalent branded and non-branded product pairs were employed. Each pair consisted of the original branded product and a general brandless product and children were asked to indicate the product they would prefer in terms of happiness, quality, popularity, and purchase intention. The emoticons were used for assessing the happy character of the brands, the three other items were

measured by asking questions to children and each question was scored 1 or 0 depending on whether the child chose the branded version.

3.1 Analysis of children brand representation and brand symbolism

This study was conducted to further the understanding of brand representation and brand symbolism among young children with different age, gender and ethnic background.

Table 2 represent the results from descriptive statistics demonstrating different levels for brand representation and brand symbolism abilities, among children with different gender, ethnicity and age, confirming hypothesized statement.

Demographic characteristics		Brand outputs	N	Mean	Std. Deviation	Minimum	Maximum
Gender	Male	Representation	24	64.04	5.94	52	74
	Female		29	64.31	6.87	51	75
	Male	Symbolism	24	11.25	0.94	9	13
	Female		26	12.96	2.54	9	17
Ethnicity	Macedonian	Representation	33	61.79	5.89	51	74
	Albanian		20	68.15	5.21	60	75
	Macedonian	Symbolism	33	12.33	2.34	9	17
	Albanian		17	11.76	1.56	9	15
Age	3 years	Representation	13	58.21	4.67	51	64
	4 years		21	62.76	4.01	57	73
	5 years		16	70.50	3.97	64	75
	3 years	Symbolism	14	11.38	0.96	9	13
	4 years		21	13.19	2.71	9	17
	5 years		18	11.38	1.15	9	13

Table 2. Brand representation and brand symbolism analysis - gender, ethnicity and age groups

An independent-samples t-test was run to determine whether differences exist in the level of brand representation between male and female children. The level of brand representation was higher at female children (64.31 ± 6.87) than male children (64.04 ± 5.94), but the differences between these two groups were not statistically significant, $t(51) = -0.251$, $p = 0.881$ (Table 3).

A Welch t-test was run to determine if there were differences in the level of brand symbolism between male and female children due to the assumption of homogeneity of variances being violated, as assessed by Levene's test for equality of variances ($p = .001$). The level of brand symbolism was higher at female children (12.96 ± 2.54) than male children (11.25 ± 0.94), a statistically significant difference of $t(32.272) = -3.207$, $p = 0.003$ (see Table 3).

Independent variables (Demographic characteristics)	Depended variables (Brand outputs)	t	df	Sig. (2-tailed)	Std. Error Difference
Gender	Representation	(0.151)	51.000	0.881	1.784
	Symbolism (Welch t-test)	(3.207)	32.272	0.003	0.533
Ethnicity	Representation	(3.971)	51.000	0.000	1.602
	Symbolism	0.901	48.000	0.372	0.631

Table 3. Independent t-test on the brand representation and brand symbolism study - gender

An independent-samples t-test was run to determine if there were differences in the level of brand representation between Macedonian and Albanian children. The level of brand representation was higher at Albanian children (68.15 ± 5.21) than Macedonian children (61.79 ± 5.89), a statistically significant difference of $t(51) = -3.971, p = 0.0005$ (see Table 3).

An independent-samples t-test was run to determine if there were differences in the level of brand symbolism between Macedonian and Albanian children. The level of Brand symbolism was higher at Macedonian children (12.33 ± 2.34) than Albanian children (11.76 ± 1.56), but the differences between these two groups were not statistically significant, $t(48) = 0.901, p = 0.372$ (Table 3). A one-way ANOVA was conducted to determine if the level of brand representation was different for the children at a different age. Children were classified into three groups: 3 years old ($n = 14$), 4 years old ($n = 21$), and 5 years old ($n = 18$). The level of brand representation was statistically significant between different age groups, $F(2) = 35.998, p < .0005$. The level of brand representation increased from 3 years old children (58.21 ± 6.67), to 4 years old children (62.76 ± 4.01), to 5 years old children (70.50 ± 3.97), in that order. Tukey post hoc analysis revealed that the increase from 3 years to 4 years old (4.547) was statistically significant ($p = .008$), also, from 3 years to 5 years old (12.285) was statistically significant ($p = .0005$), as well as the increase from 4 years to 5 years old (7.738) was statistically significant ($p = .0005$).

Independent variables (Demographic characteristics)	Depended variables (Brand outputs)	df	F	Sig.
Age	Representation	2	35.998	0.000
	Symbolism (Welch t-test)	2	4.128	0.026

Table 4. One-way ANOVA on the brand representation and brand symbolism study - age

Similarly, a one-way Welch ANOVA was conducted to determine if the level of brand symbolism was different for children at different age (as the Homogeneity of variances was violated, assessed by Levene's Test of Homogeneity of Variance, $p = 0.0005$). The level of brand representation was statistically significantly different between different age groups, Welch's $F(2) = 4.128, p < 0.026$.

Dependent Variables (Brand outputs)	Independent variable (age groups)		Mean Difference (I-J)	Sig.
	(I) Age	(J) Age		
Representation	3 years	4 years	(4.547)*	.008
		5 years	(12.285)*	.000
	4 years	3 years	4.547*	.008
		5 years	(7.738)*	.000
	5 years	3 years	12.285*	.000
		4 years	7.738*	.000
Symbolism	3 years	4 years	(1.805)*	.026
		5 years	0.009	1.000
	4 years	3 years	1.805*	.026
		5 years	1.815*	.026
	5 years	3 years	(0.009)	1.000
		4 years	(1.815)*	.026

Table 5. Post Hoc Tests on the brand representation and brand symbolism study – age

The level of brand symbolism increased from 3 years old children (11.38 ± 0.96) to 4 years old children (13.19 ± 2.71), and decreased to 5 years old children (11.38 ± 1.15), in that order. In this case, a group of 4 years old children has the highest level of brand symbolism. Games-Howell post hoc analysis revealed that the increase from 3 years to 4 years old 1.805 was statistically significant ($p = .026$), as well as the decreased from 4 years to 5 years old -1.815 was statistically significant ($p = .0026$), but no other group differences were statistically significant.

4. Discussion

The purpose of this research was to determine whether understanding of brand representation and symbolism differ among children with different demographic characteristics. The study provides new insight into young children's brand symbolism understanding by carefully selecting ethnically diverse sample. Consistent with McAlister and Cornwell's (2010) findings, the analysis confirms that young children are more successful at recognizing children's brands compared to adult brands. When analyzed by product type, toys demonstrated the highest rate of brand recognition among children aged three to five years old. Young children were found to be more likely to recognize a foreign brand compared to a domestic one. Children brand recognition at an early age may have implications on children's long-term consumption preferences and values. Understanding the effects of brand symbols among young children will contribute to a more informed approach among marketing managers to create marketing activities for a specific target group. The way young children perceive brand names will have an impact on their future consumer judgment and potential development of a materialistic orientation.

Findings reveal the existence of different levels of mental brand representation ability and brand symbolism understanding among young children with different demographic characteristics. Female children demonstrated a greater understanding of brands as symbols and are more aware of products conveying social status features, but there was no evidence for statistically significant differences for symbolic meanings of brands among children with different ethnic backgrounds.

Findings indicated that children's ability for the mental representation of brands and recognition of brand symbolism is emerging with age, which is consistent with previous studies (Derscheid et al., 1996; Fischer et al., 1991). The level of understanding of symbolic brand associations has the most significant development between the ages of three and four years. The results extend the findings of previous papers by analyzing children with different ethnic backgrounds and assess levels of brand recognition and brand symbolism among children with different ethnicity, age, and gender. Young children perceive brands as a source of self-identity and social recognition, which may indicate preferences for purchasing and consuming certain products over others. Therefore, holding a better understanding of the way different children understand brands will improve implementing better brand strategies consistent with children's brand preferences.

5. Limitations and Future Research

A limitation of the study was the small number of interviewed children from only one city. Therefore, it was not a representative geographical sampling. Future research in this area should implement much larger sample of children adding socioeconomic status as a variable of interest, a more diverse sample of family categories and extend existing research by assessing the environmental factors in young children understanding of brand symbolism.

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Seamless Shopping in Omnichannel Retailing: The effect of Channel Integration on Consumers' Responses

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Abstract:

Increasing competition in the retailing sector prompts retailers to implement omnichannel strategies to achieve seamless customer shopping experience. Retailers seek to integrate channels so that customers can seamlessly switch amongst them during the shopping journey. However, despite its prominence in practice, there is limited omnichannel research regarding how retailers can create seamless shopping and the beneficial consequences that can be gained from it. The purpose of this study is to establish the drivers and outcomes of seamless shopping experience. To achieve this goal, we find that seamless shopping leads to more loyalty, customer engagement, higher basket size, and a lower likelihood of switching to other brands. We also advance theory by exploring the effect of channel integration on seamless shopping, in contribution to omnichannel research and practice.

Keywords: *channel integration, seamless shopping, omnichannel retailing*

1 Introduction

Omnichannel retailing is deemed critical to retailer success (Verhoef, Kannan, & Inman, 2015). In the move from multichannel to omnichannel, customers now shop over several channels simultaneously during the purchasing journey. Whilst they interact with several consecutive channels, they expect and demand a seamless shopping journey without disruptions (Piotrowicz & Cuthbertson, 2014). Given that omnichannel is a key priority for retailers, firms invest in channel integration to achieve seamless shopping (Cao & Li, 2015; Zhang et al., 2010), however, it is not clear whether these investments are paying off. Research has suggested that one of the main retailer challenges of integrating channels is to provide seamless shopping over channels to obtain strategic advantage (Grewal, Roggeveen, & Nordfält, 2016) yet there remains little empirical evidence of channel integration leading to seamless shopping. Subsequently, consumer outcomes of loyalty, purchase intentions and customer retention (Bendoly, Blocher, Bretthauer, Krishnan, & Venkataramanan, 2005; Herhausen, Binder, Schoegel, & Herrmann, 2015) show promising results of retailers' efforts to integrate channels. Yet little research has attempted to discover the internal experiential elements that may enhance or inhibit these outcomes.

This study makes three contributions to the literature. Responding to several calls for further research on creating seamless purchase journeys (Marketing Science Institute, 2018), we join channel integration and customer behavioral research to help us understand the chain of processes and control in the omnichannel retailing chain of effects. Based on multilevel structural equation modeling of consumer data and 30 retailers in two countries (the UK and France), we suggest that seamless shopping mediates the relationship between firm-channel integration and consumer outcomes of customer engagement, loyalty, basket size, and brand switching. By exploring this framework, we offer additional insights into the outcomes of seamless shopping and provide robust research into the firm channel integration – seamless shopping research will provide valuable insights for managers looking to achieve their omnichannel strategies. Lastly, we update channel integration measures that are becoming quickly outdated. Therefore, the purpose of this research is to empirically test a research framework of seamless shopping to advance omnichannel research and practice.

2 Conceptual Background and Hypotheses

The influence of online and offline retail environments on consumer behavioral responses is significantly grounded in servicescape theory (Bitner, 1992). The two states of retailer environment and consumer response are causally linked, such that the retailer environment causes consumers to respond cognitively, affectively, and physiologically. The servicescape perspective identifies that managers continually “plan, build and change” the retail environment to control consumer responses (Bitner, 1992, p. p.57). Building on this, we propose that managers desire to develop the shopping environment across physical channels and touchpoints, to manage seamless customer shopping experiences and influence consumer behavioral responses.

Channel Integration

The occurrence of seamless shopping is dependent on the extent to which channel integration is optimized (Cao & Li, 2015). Channel integration encompasses the employment of more than one channel and the level at which channels interact with each other (Bendoly et al., 2005). More recently, channel integration has been identified in an omnichannel context as “the degree to which a firm coordinates the objectives, design, and deployment of its channels to create synergies for the firm and offer particular benefits for its consumers” (Cao

& Li, 2015, pp., p.200). Firstly, this identifies integration as a firm controlled set of activities, from which the consumer can benefit. For example, the firm provides Wi-Fi in-store so that consumers can quickly find more information on products on their mobiles. Secondly, this suggests cause and effect between firm controlled channel integration and the delivery of beneficial outcomes for the consumer. Thirdly, channel integration contains valance, implying that firms can be more integrated, or less integrated. This suggests that consumer outcomes of channel integration can be more or less favourable. In contribution to servicescape theory (Bitner, 1992), we propose that retailer integration is considered as an environmental dimension that influences seamless shopping as an internal customer response. Therefore, companies striving to integrate their channels will create more efficient shopping environments, prompting customers to perceive their shopping experience as being seamless.

Seamless Shopping

Seamless shopping is defined as *the customer perception of a continuous and consistent shopping journey across multiple channels with a single retailer* (Cocco & Demoulin, 2020). Further definitions suggest that seamless shopping contains physical connections between ‘channels and devices such as a desktop, laptop and mobile devices’ (Verhoef et al., 2015, p. p.176), online and offline (Brynjolfsson, Hu, & Rahman, 2013) and ‘within and across channels’ (Banerjee, 2014, p. p.460). Seamless shopping also implies that the connections between channels and touchpoints become blurred so that boundaries become irrelevant (Hansen & Sia, 2015). The central theme behind these ideas is that seamless experience is characterized by consistency and continuity within the experience.

The construct of seamless shopping has emerged from the intersection between channel integration and customer experience literature. It is often referred to as the optimum experience in customer experience literature (Grewal et al., 2016; Kumar, 2018; Lemon & Verhoef, 2016) whilst it is considered as the consumer response to integrated channels in channel integration literature (Cao & Li, 2015). Seamless shopping is also referred to as an aspiration of omnichannel retailing strategy (Kumar, Rajan, Gupta, & Pozza, 2019; Piotrowicz & Cuthbertson, 2014). Channel integration enables seamless experiences to occur (Banerjee, 2014) and it is often cited as a benefit or objective of integration strategy (Cao & Li, 2015; Zhang et al., 2010). The two constructs are therefore likely to be causally linked. Therefore we propose the following hypothesis:

H1: The more retailers integrate their channels, the higher customers evaluate their shopping as seamless.

Consequences

We propose that seamless shopping is an internal response that leads to behavioral consequences (following Bitner (1992)), which strengthens the experience by fulfilling consumer expectations, satisfying experiences, and retained shoppers (Lemon & Verhoef, 2016). Furthermore, seamless shopping has been suggested to improve customer engagement, avoid brand switching, and increase basket size (Hansen & Sia, 2015; Wallace, Giese, & Johnson, 2004). Therefore we expect that seamless experience will almost often lead to better loyalty to the firm, further interaction with the brand, less brand switching, and higher basket size. Seamless experience is therefore anticipated to lead to positive and strong behavioral outcomes identified in marketing literature; loyalty, customer engagement, brand switching, and basket size.

Loyalty

Loyalty is defined as “the intention to buy from the brand as a primary choice” (Yoo & Donthu, 2001p.3). As customers move between channels and touchpoints throughout their customer journey, the multiple interactions offer more opportunities for consumers to

construct an opinion about a brand. When the experience is more consistent and continuous, this improves convenience, which leads to higher loyalty (Grewal, Levy, & Kumar, 2009; Lemon & Verhoef, 2016). Therefore, we suggest that seamless shopping increases loyalty.

H2A: Seamless shopping increases customer loyalty.

H2B: Seamless shopping mediates the relationship between firm-channel integration and customer loyalty.

Customer Engagement

Customer engagement behaviors are interactions between customer and firm that go beyond purchase (Brodie, Hollebeek, Jurić, & Ilić, 2011; Jaakkola & Alexander, 2014; Van Doorn et al., 2010). Less time and effort expended in dealing with shopping problems may promote positive opportunities to engage during the experience or free up time to engage post-purchase (e.g. publish an online review). Therefore, we expect a positive relationship between seamless shopping and customer engagement:

H3A: Seamless shopping increases customer engagement.

H3B: Seamless shopping mediates the relationship between firm-channel integration and customer engagement.

Brand Switching

Brand switching is defined as the termination of a relationship with the service provider and switching to an alternative provider (Zeelenberg & Pieters, 2004). Cross-channel failures in multichannel retailing prompt customers to switch to another retailer (Wallace et al. 2004). Therefore, as customers move simultaneously amongst channels, a lack of integration may cause a lower perception of seamless shopping, resulting in switching to a competing brand. Therefore, we hypothesize that:

H4A: Seamless shopping decreases the likelihood of switching to other brands.

H4B: Seamless shopping mediates the relationship between firm-channel integration and brand switching.

Basket Size

Basket size is defined as the total number of items in the shopping basket (Desai & Talukdar, 2003). When consumers shop across multiple channels, they purchase up to four times more than those shopping in a single channel (Stone, Hobbs, & Khaleeli, 2002). As customers seamlessly switch over channels, they may put more items in their shopping basket due to flow that has been found to lead to impulse purchases (Park, Kim, Funches, & Foxx, 2012). Therefore, we expect seamless shopping to lead to higher basket size:

H5A: Seamless shopping increases basket size.

H5B: Seamless shopping mediates the relationship between firm-channel integration and basket size.

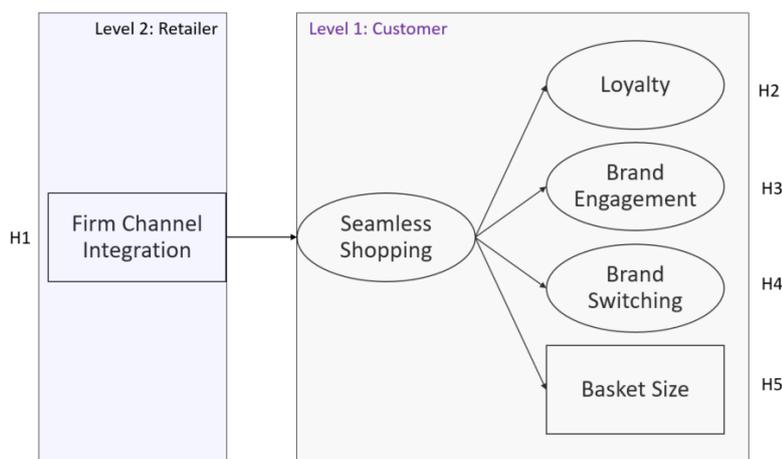
Figure 1 identifies the proposed conceptual framework.

3 Methodology

To empirically test the framework, we conducted two studies that establish seamless shopping in a mediated model. To enable us to empirically investigate the framework, an updated measure of channel integration (antecedent) is required. Therefore, we assess all known channel integration measures and the literature, to construct a new measure. We then observe 30 retailers in two markets, France and the UK, using the measure, which enables us to empirically investigate the framework in both countries. In study 1, we test the link between firm-channel integration and seamless shopping, and seamless shopping on consumer consequences in the French retail industry. In study 2, we confirm the framework for a second time in the UK retail industry. Both the French and U.K. retail industries have

strong retail economies, and both have experienced continued growth in online and offline retailing in recent years.

Figure 1: Conceptual Framework showing hypothesized relationships



Measures

To accurately measure the framework based on its conceptualizations we empirically investigate channel integration from a firm perspective and seamless shopping and all behavioral consequences from a consumer perspective. For firm-channel integration, we constructed a new measurement tool and observed 30 retailers. To measure the mediator and outcome constructs for each study, we used an online customer survey instrument containing the seamless shopping scale (chapter 2) and existing scales from the literature.

To measure channel integration, we assessed several existing scales (Bendoly et al., 2005; Cao & Li, 2015; Frassetto, Frassetto, Miquel, & Miquel, 2017; Lee & Kim, 2010). We added additional items based on a literature review, to form a new measure that addresses channel integration in an omnichannel context. To measure consumer perspectives, a 7-item scale was used to measure seamless shopping in two dimensions; value harmonization and uninterrupted shopping journey. Loyalty was assessed using a 3-item Likert scale adapted from Yoo and Donthu (2001) and customer engagement was measured using a 2-dimensional 7-item Likert scale (Hollebeek, Glynn, & Brodie, 2014). Brand switching was measured using a 3-item Likert scale adapted from Romani, Grappi, and Dall'Aglio (2012). All items were assessed using a 7-point Likert scale (1 = "strongly disagree" to 7 = strongly agree). Finally, basket size was measured based on the number of items purchased during the shopping experience (Nichols, Raska, & Flint, 2015).

Assessing Channel Integration

A total of 63 channel integration existing items were reviewed from four scales. They were deemed unsuitable due to the pace of evolution in channel integration (Verhoef et al., 2015) meaning that scales are likely to become quickly outdated. To address this limitation, from the review of channel integration literature and current retailing practices, we added 7 items. These items included integration initiatives between mobile and store, such as the inclusion of a barcode scanner on an app and integration between online devices such as basket storage across online channels.

We added the updated items to the 63 established scale items for a total of 70 items. We then assessed content validity and removed all duplicates, ambiguous, or inappropriate items, which totaled 34 items. As we reviewed several retailers' integration from outside the firm, we removed 10 items relating to operations because they could not be objectively

measured from outside the firm. We removed a further three items because there was little evidence of their existence in one or both of the countries of study. Following Cao and Li (2015), we categorized the items in general stages of channel integration development, as opposed to dimensions. The final integration measure features 21 items and can be found in table 1.

To establish order, pattern, and hierarchy of firm-channel integration, we used a cumulative method called the Guttman scalogram analysis (1944, 1950), which develops a probabilistic approach to increasing levels of difficulty. To construct the scalogram, we observed each retailer (13 French retailers and 17 British retailers for a total of 30 retailers) using the 21-item channel integration measure and identified a 1 for compliance or 0 for non-compliance. Table 1 shows the final scale. The reproducibility coefficient of the patterns was .91 for study 1 and .92 for study 2, which are higher than the .9 recommended level (Guttman, 1950).

Assessing Consumer Perceptions

Using a reputable data collection agency, the first consumer survey was carried out with French respondents (n=346, 31.9% female, average age: 35). To ensure semantic equivalence, items were translated and back-translated by several French and U.K. faculty members. Study 2 was carried out with U.K. retailers and consumers (n=344, 67.7% female, average age:37). In each study, respondents were asked to recall a recent shopping experience that occurred within the last three months, to verify an accurate response. To ensure that the conditions were met for a seamless shopping experience, we asked respondents to recall a shopping experience where they had used two or more channels. In each study, we asked respondents to specify the retailer with which they had had their shopping experience.

In both studies, we imposed a pre-defined list based of the top-20 multiple-channel retailers by turnover. Following clarification of their recalled shopping experience, respondents were asked to rate the seamless shopping scale and the outcome variables.

4 Analysis and Results

Multilevel Model

We used Multilevel modeling (MLM) to test the hypotheses since our data encounters an observed predictor variable (firm-channel integration) and perceived dependent variables as rated by customers of the firm. All hypotheses that contain 'A' are focused on the relationships at the individual level, whilst all hypotheses that contain 'B' are focused at both the retailer and customer level. We first undertook several procedures to examine the reliability and validity of the customer scales. First, we used exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to investigate the structure and variance for each data set. EFA and CFA revealed that each construct loaded onto its own factor and explained 66% for study 1 and 69% for study 2. The studies provided adequate model fit (Study 1; $\chi^2 = 508.399$ (142), RMSEA = .066, CFI = .918, TLI = 0.907 and study 2; $\chi^2 = 568.281$ (202), RMSEA = .073, CFI = .922, TLI = 0.911). The Cronbach's alpha was calculated for each construct and ranged from .743 to .920 throughout all studies. In support of convergent validity, all CR's were above the .7 threshold, and the AVE's were above .5 (Fornell & Larcker, 1981). To confirm discriminant validity, all AVE's were found to be higher than the squared correlation between each pair of constructs (Fornell & Larcker, 1981). To examine the requirements for MLM, we carried out an intraclass correlation test (ICC) to assess suitable variance between groups. The ICC was 8% in Study 1 to 6% in study 2. This indicates that up to 8% of the differences in customer perceptions could be attributed to retailer differences.

Table 1: Integration Measurement Items

Classification	Code	Item	Source
Integration between online and offline	1	Retailer's online channels provide information about stores such as location, delivery points locations, access information and opening hours	Adapted from Frasset and Miquel (2017); Lee and Kim (2010); Bendoly et al. (2005)
	2	Click and pick-up in-store	Cao and Li (2015)
	3	Buy online and return in-store	Cao and Li (2015)
	4	Allowing online consumers to browse the inventory in-store	Cao and Li (2015)
	5	Past purchases in the store can be found online	Frasquet and Miquel (2017)
Alignment	6	Align marketing message across channels	Cao and Li (2015)
	7	Align price across channels	Cao and Li (2015)
	8	Align loyal program across channels	Cao and Li (2015)
	9	Align assortment across channels	Cao and Li (2015)
	10	The retailer provides consistent product information across channels	Lee and Kim (2010)
	11	Align promotion across channels	Cao and Li (2015)
Integration between online and mobile	12	Integrated marketing communication across channels	Cao and Li (2015)
	13	The website is optimized for the mobile	New item, inspired by Wang et al (2015)
Integration between offline and online	14	The customer basket/cart online is accessible in the app or mobile website	New item, inspired by Close and Kukar-Kinney (2018)
	15	The firm advertises its website at its local stores	Bendoly et al. (2005)
	16	Employees at the firm's stores are knowledgeable and helpful regarding the use of its Web site	Bendoly et al. (2005)
	17	Past purchases online can be accessed in the store	New item, inspired by Homburg et al. (2017)
	18	The physical store allows me to do an order online	Frasquet and Miquel (2017)
Integration between online and customer-service	19	The physical store allows for checking product availability online via a kiosk/mobile or customer service representative.	Lee and Kim (2010)
	20	Click-to-call or click-to-chat	Cao and Li (2015)
Integration between offline and mobile	21	The firm advertises its mobile app at its local stores	Based on Bendoly et al. (2005)

Within effects are those that happen within the groups, i.e differences in individual customer responses. 'Between' are the effects that take place between the groups, i.e differences between the groups. The relationship between the predictor and mediator variables means that the traditional mediation 'path *a*' in our model takes place from level 2 (X) to level 1 (M). In contrast to the *a* path, the *b* path occurring between mediator and outcome variables in our model (All 'A' hypotheses) takes place at the individual customer level (the 1-1 part of the 2-1-1 model).

Direct Effects

Regarding the direct effects of firm-channel integration on seamless shopping, the effect was positive and significant; study 1: $\beta = .15, p < 0.05$ and study 2: $\beta = .12, p < 0.05$. Therefore, there is strong support for H1 in all studies. Firm-channel integration is positively related to consumer perceived seamless shopping. In support of H2A, positive and significant relationships were found between seamless shopping and loyalty (Study 1: $\beta = .24, p < .01$, Study 2: $\beta = .30, p < .001$). Results thus show that seamless shopping is a good predictor of loyalty.

In support of H3A, positive and significant relationships were found between seamless shopping and both customer engagement dimensions. For the cognitive dimension, Study 1: $\beta = .23, p < .05$, Study 2: $\beta = .26, p < .001$. For the affection dimension, Study 1: $\beta = .35, p <$

.001, and in Study 2: $\beta = .45, p < .001$). Therefore, we find evidence to support that seamless shopping leads to customer engagement.

Negative significant indicators were found between seamless shopping and brand switching in both studies. For Study 1: $\beta = -.12, p = .115$ and in Study 2: $\beta = -.38, p < .001$. H4A is therefore supported in the UK study but not in the French study. This suggests that French consumers may be more loyal to retailers, even if channel integration is low. Lastly, in support of H5A, a positive and significant relationship was found between seamless shopping and basket size for Study 1: $\beta = .37, p < .005$, and for study 2, $\beta = .18, p = .05$. Therefore, H5A is supported. We find evidence that seamless shopping leads to basket size.

Indirect Effects

In addition to the direct effects, we investigated indirect effects. The direct paths from seamless shopping to loyalty are positive and significant whilst the direct paths between firm-channel integration and loyalty are not significant. In both studies, the indirect path between firm-channel integration and loyalty, mediated by seamless shopping is significant (study 1: $\beta = .05, p < .05$, study 2: $\beta = .04, p < .05$). We conclude that H2B is supported. Therefore, seamless shopping fully mediates the relationship between firm-channel integration and loyalty.

Indirect effects between firm-channel integration and customer engagement via seamless shopping are both positive and significant. This indirect effect is supported in both dimensions, cognitive and affection, in both study 1 and 2. For the cognitive dimension, in Study 1: $\beta = .05, p < .05$ and Study 2: $\beta = .03, p < .05$. For the affective dimension, in Study 1: $\beta = .06, p < .05$ and Study 2: $\beta = .05, p < .05$. As the direct paths between channel integration and both customer engagement dimensions are not significant, H3B is supported. Seamless shopping fully mediates the relationship between firm-channel integration and customer engagement.

The indirect effect between integration and brand switching, mediated by seamless shopping is not significant in study 1 ($\beta = -.02, p = ns$) but is significant in study 2 ($\beta = -.04, p < .05$). As the direct paths are not significant, we conclude that only in study 2, H4B is supported. Seamless shopping fully mediates the relationship between firm-channel integration and brand switching for the UK population only. Lastly, the direct path between firm-channel integration and basket size is not significant (Study 1: $\beta = .09, p = ns$, Study 2: $\beta = .09, p = ns$), whilst the indirect effect is significant in study 1 ($\beta = .07, p < .05$) but not significant in study 2 ($\beta = .02, p = ns$). H5B is supported in study 1 but not in study 2. Therefore seamless shopping mediates the relationship between channel integration and basket size with the French population, but not with the UK population.

5 Discussion

Theoretical Implications

This research aims to extend knowledge of the chain of events from channel integration to seamless shopping and behavioral outcomes, which is central to omnichannel retailing strategies. Based on servicescape theory (Bitner, 1992), we developed hypotheses on main and mediating effects, and tested them with data from two different retail settings, adding to the generalizability of results. Our analysis confirmed that in two separate country studies, channel integration leads to seamless shopping, and seamless shopping leads to loyalty, customer engagement, and a higher basket size.

Firstly, results regarding the consequences in this framework are important because the literature lacks a solid understanding of seamless shopping and the role that it plays in omnichannel retailing. The results also reinforce the importance of achieving seamless

shopping. Secondly, this research empirically confirms the relationship between channel integration and seamless shopping. Although the link between channel integration and seamless shopping has been suggested in the literature (Bendoly et al., 2005; Cao & Li, 2015), we find that a strong omnichannel retailing strategy anchored in channel integration efforts is pivotal to achieving seamless shopping. Our results empirically explain the valuable role that channel integration has to play in influencing seamless shopping, thus advancing channel integration research. Thirdly, this study extends pivotal research in the channel integration field by updating existing measures into the omnichannel environment (Cao & Li, 2015; Herhausen et al., 2015; Verhoef et al., 2015). Our results show that implementing this comprehensive set of integration activities, is likely to improve seamless shopping.

Managerial Implications

More integrated channels result in more seamless shopping, whilst less integrated retailers are likely to achieve lower seamless shopping. Our results are also very encouraging for the achievement of positive outcomes following seamless shopping. This provides evidence for managers to encourage directors or funders of omnichannel retailers to invest in channel integration initiatives, to enhance their seamless shopping strategic objectives. The 21-item firm-channel integration measurement tool serves as a checklist to help retailers compete against online retailers and assist them in reaching their seamless shopping goals. Secondly, following analysis of both French and UK retailers, we find continuing evidence that retailers are failing to align prices and promotions; Brands failing to operate basic channel integration initiatives that promote seamless shopping perceptions, are likely to fall behind the competition.

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Positive alcohol outcome expectancies: Does personal binge drinking experience matter?

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Abstract:

The main purpose of this study was to understand behavioral drinking patterns in accordance with positive alcohol outcome expectations. The data were collected on a sample of students from Bosnia and Herzegovina. Several regression models were used to observe alcohol consumption continuum in interaction with binge drinking. Results have shown the existence of marginal point where binge drinking behavior doesn't affect positive outcome expectancies, but the non-binge drinkers believe that intensive drinking leads to positive outcomes. This study contributes to deeper understanding of relation among drinking patterns and positive alcohol expectancies as a starting points for social marketing strategies.

Keywords: *Motivational theory, Binge drinking behavior, Alcohol outcome expectancies*

1. Introduction

The concept of drinking motives is based on the assumption that people drink with a goal to accomplish certain outcomes that they valued. Cox and Klinger (1988) have proposed the model in which drinking motives can be characterized by two underlying dimensions reflecting the valence (positive and negative) and sources (external and internal) of the outcomes an individual hope to achieve by drinking. Crossing these two dimensions' authors have extracted four classes of motives: social motives, coping motives, conformity motives and enhancement motives. Cooper's study (1994) has initially supported the conceptual validity and pragmatic utility of those motivational factors and many subsequent studies have confirmed that drinking motives are important factors of different patterns in alcohol consumption (Lannoy, Dormal, Billieux, & Marge, 2019). Some studies also suggested that alcohol outcome expectancies predict drinking motives, which in turn predict drinking behavior (Hasking, Lyvers, & Carlopio, 2011). Alcohol outcome expectancies can be divided on two broad categories: the positive outcome expectancies and negative outcome expectancies. Du Preez, Pentz and Lategan (2016) argue that drinking motives and alcohol outcome expectancies are two interrelated antecedents which have the most proximal predictors of drinking behavior of individuals but also that this approach offers a respectable explanation power in case of students surveys. The purpose of this paper is to address drinking motives and alcohol outcomes expectancies related to binge and non-binge alcohol consumption patterns of university students. Binge drinking is a widespread practice of excessive alcohol drinking pattern characterized by episodes of intensive consumption and abstinence periods. Many clinical and convenience sample studies have confirmed binge drinking occurrence in young population as a good predictor of future harmful and hazardous alcohol consumption (Blank, Connor, Gray, & Tustin, 2015). Binge drinkers and non-binge drinkers differ in drinking behavior patterns and these different alcohol experiences can potentially influence alcohol outcome expectations. The main goal of this paper is to explore potential differences in the positive alcohol outcome expectancies among sub-groups with different behavioral drinking patterns and different levels of drinking experience.

2. Conceptual framework

2.1. Theoretical backgrounds

In accordance with The Expectancy Theory of Motivation an individual will decide to behave or act in a certain way because she or he is motivated to select a specific behavior over alternative behaviors due to what she or he expects the outcome will be of that selected behavior (Cox & Klinger, 2004). Within Expectancy theory, behavior is explained by individuals having expectations of particular reinforcing effects as the outcome of performing the behavior in question. According to Cox and Klinger (2004) alcohol expectancies differ from motives or reasons to drink. Expectancies are the cognitive representations of an individual's past direct or indirect learning experience with alcohol. In contrast, reasons for drinking are an individual's specific motivations for using alcohol, that is the outcomes to hope to attain by drinking. *In other words, expectancies are peoples' beliefs about what will happen if they drink alcohol, whereas motives are the value placed on the particular effects they want to achieve, which motivates them to drink; or the effects they want to avoid, motivating them not to drink* (Cox & Klinger, 2004, p. 126). Jones, Corbin and Fromme (2001) argue that Expectancy Theory provides the opportunity to understand alcohol consumption at all points of the continuum of consumption within a single common

framework that relies on fewer assumptions. In that context authors emphasized the importance of Social Learning perspective which collaborates principles of learning established through research on observable behavior with constructs based on cognitive processes that are, themselves, not directly observable (Jones, et. al, 2001). The social learning framework proposes that the particular alcohol outcome expectancies are the results of direct and indirect experience with alcohol and alcohol paraphernalia. From the Social Learning perspective alcohol expectancies are regarded as structures in long-term memory that have impact on cognitive processes governing current and future behavior.

2.2. Empirical evidence on drinking motivations and positive alcohol outcome expectancies

Studies have had inconsistent results in accordance with predictor value of different motives that influence youth drinking patterns in general as well as binge drinking behavior in particular. Many studies have found social motives to be significantly positively correlated with quantity and frequency of alcohol consumption among young people (Cooper, 1994; Leko Šimić & Turjak, 2018; Van Damme et al., 2013). Several studies have also found that the satisfaction of social needs (Abbey, Smith, & Scott, 1993) as well as peer influence (Berkowitz, 1990; Bosari & Carey, 2001) are the major factors of binge or excessive drinking. Some studies found that all motivational factors have emerged as an important predictors of binge drinking but some have higher predictive value such as coping motives (Laghi et al., 2016) or enhancement motives (Lannoy et al., 2019). When it comes to combination of cross-sectional and longitudinal research designs, studies fund that different motives influence different phases or stages of drinking behaviors (Besler et al., 2008). Regarding the alcohol consumption expectations, the results are also differing (Hasking, et al., 2011). However, more consistent results have been confirmed in the case of positive alcohol outcome expectancies when it comes to young population. Positive expectancies refer to the belief that effects such as sociability and confidence are gained or enhanced by the consumption of alcohol. A study by Leigh and Stacey (1993) showed that students' positive expectancy was a stronger predictor of frequency of drinking than was negative expectancy. Authors concluded that students who drink for social reasons usually have positive expectations. They tend to associate alcohol consumption with fun, laughter, relaxation, feelings of euphoria, and sex. Balodis, Potenza and Olmstead study (2009) did not reveal differences between binge and non-binge drinkers in the alcohol outcome expectations. On the other hand, Bartoli et al. (2014) have confirmed that young binge drinkers show higher level of alcohol expectancies in comparison with non-binge drinkers. Jester et al. (2015) have found that the onset of binge drinking was predicted by social expectancies in youth with a family history of severe alcohol use disorders.

2.3. Positive alcohol outcome expectancies and drinking experience: model conceptualization

From the previous theoretical and empirical analysis can be concluded that alcohol motives and outcome expectancies are interlinked. The common characteristic of motives and outcomes expectancies is that both predict drinking behavior. The second common characteristic is also that motives and outcome expectancies are also shaped by different sociocultural and personality factors. According to Cox and Klinger's (2004) A Motivational Model of Alcohol Use, alcohol outcome expectancies are influenced by an individual's past indirect or direct learning experience with alcohol. In the frame of social learning theory, indirect learning process about expected alcohol outcomes is mostly related to the wider social

environment. Gordon, Harris, Mackintosh and Moodie (2011) found that many factors from social environment influence youth drinking intentions and behaviors, including alcohol marketing activities. Authors have emphasized several conclusions: 1) young people being aware of more alcohol marketing channels and linking alcohol advertisement increased the odds of being drinkers; 2) having siblings and friends who drink, and believing that friends and family consider that drinking is acceptable behavior, also increases odds of being drinkers. Jeringan, Noel, Thornton, and Lobstein (2016) in the systematic meta-analysis of longitudinal studies on alcohol youth consumption have found that young people who have greater exposure to alcohol marketing appear to be more likely to initiate alcohol use and engage in binge drinking. Noel, Babor and Robaina, (2016) in meta-analysis of studies evaluating specific code and alcohol marketing content concluded that youth exposure to alcohol advertising increased over time. They also found that that most alcohol advertising themes are linked to positive appeals such as humor, relaxation and friendship. Noel et al. (2016) have concluded that alcohol marketing activities promote the idea of personal benefits of consuming alcohol with descriptors as funny, clever, attractive and in many cases suggesting that drinking helps in gaining social success.

Direct learning process about alcohol outcome expectancies is mostly linked with a personal drinking experience and past reinforcement from drinking. When it comes to positive personal experience with outcomes of drinking, positive reward will be expected every time when person displays drinking behavior. These propositions are in line with a motivational model of alcohol use where past reinforcement from drinking influence learned cognitive and conditioned reaction to alcohol (Cox & Klinger, 2004, p. 125). Fleming, Thorson and Atkin (2004) found that different age groups of youth differ in the relational patterns of alcohol marketing exposure, positive expectancies and consumption of alcohol. Positive alcohol expectancies of younger age group (15-20) have been mostly influenced by indirect perceptive factors and as a results of marketing exposure. From the other hand, positive alcohol expectancies of older group (21-29) have been built up as a function of both indirect experiences and their one experience of drinking. Considering the fact that binge drinking represents a self-reported experience with the certain behavioral patterns of alcohol consumption, it is justified to suggest that experience in heavy episodic drinking can significantly influence further outcome expectancies from drinking behavior. After several episodes of heavy drinking, expected alcohol outcomes become transformed to experience of positive or negative reinforcement. Looking from the social learning perspective, the past reinforcement from drinking as a result of personal drinking behavior will influence every subsequent alcohol outcome expectancies as a result of learning from personal experience. In the frame of described conceptualization the main research question is: does higher level of personal experience affect positive alcohol outcome expectancies?

2. Research methodology

2.1. Measurement instruments

Recent studies mostly used the revised questionnaire version of The Drinking Motives Questionnaire - DMQ-R, which contains 20 items describing four motivational factors (Cooper, 1994): social motives (e.g., "to be sociable"); coping motives (e.g., "because it helps when I feel depressed or nervous"); enhancement motives (e.g., "to get high"), and conformity motives (eg. "so that other wouldn't tease me about not drinking"). The revisited version - DMQ-R has also been used in this study. Participants were asked to indicate how frequently

their drinking is motivated by each item on a five point Likert-type scale, ranging from 1 'almost never/never' to 5 'almost always/always'.

The Drinking Expectancies Questionnaire Revised - DEQ-R is a widely used a 37-item scale personal beliefs about drinking (Leigh & Stacey, 1993). In the current study dimension of positive alcohol consumption expectancies - Increased Social Confidence has been used. Participants were asked to disclose their beliefs about positive alcohol expectancies of Increased Social Confidence using a five-point Likert-type scale (1-strongly disagree to 5 – strongly agree). Cronbach's alpha test has confirmed metric validity of the Increased Social Confidence ($\alpha = .918$.)

The AUDIT was developed by the World Health Organization in 1982 as a simple way to screen and identify people who are at risk of developing alcohol problems. The AUDIT test focuses on identifying the preliminary signs of hazardous drinking and mild dependence. It is used to detect alcohol problems experienced within the last year. AUDIT contains 10 questions examining: alcohol consumption (3 items), drinking behavior (3 items), adverse reactions (2 items) and alcohol-related problems (2 items). Binge drinking is a widespread practice of excessive alcohol drinking pattern characterized by episodes of intensive consumption and abstinence periods. It is usually related to young population (adolescents, students) and weekend heavy alcohol consumption. There are different metric definitions of binge drinking depending on the research contexts and approaches. Blank et al. (2015) confirmed that using a single AUDIT-3 preforms excellent in identifying binge drinking in younger population which was also used in the current study.

2.2. Data collection and sample characteristics

The data were collected on convenience sample of undergraduate students from the different parts of Bosnia and Herzegovina. Among a total number of 369 participants, 225 were female (61.0%) and 132 were male (35.8%). The average age of sample was 21. With the purpose to address the main research question sample has been divided in two sub-samples with cut off criteria defined as score on the AUDIT 3 with ≥ 6 standard drinks per occasion at least once a week.: binge-drinkers (14.5%) and non-binge drinkers (85.5%). Among non-binge group females are in majority (68.8%) in contrast with binge drinking group were dominating male respondents (72.0%).

3. Analysis and findings

The main research question is: does higher level of experience in alcohol consumption affect positive alcohol outcome expectancies? In accordance with previously described empirical findings that in most cases binge drinkers show higher enthusiasm about drinking trough higher motivations and more positive alcohol expectancies in comparison with non-binge drinkers. The next table (Table 1) shows results of t-test which describe differences among binge and non-binge sub groups in four motivational factors.

Table 1. Independent *t*-test

	non-bd (<i>N</i> = 313)		bd (<i>N</i> = 53)		<i>t</i>
	Mean	SD	Mean	SD	
Social	3.32	1.00	4.25	.76	-7.86 ***
Coping	1.78	.85	2.63	1.26	-4.74 ***

Enhance	2.29	.93	3.48	1.08	-7.54 ***
Conform	1.33	.57	1.82	1.15	-3.01 ***

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$; *ns* = not significant

In the table are showcased the results of the independent t-test with which it was tested whether or not there was a statistically significant difference between the two groups averages. According to all indicators, binge drinking group has larger average values in all four motivational factors and the difference is indeed statistically significant. The next table shows results of series of regression models where dependent variable is Increased Social Confidence – ISC as an observed dimension of positive alcohol outcome expectancies (Table 2).

Table 2. Regression analysis results

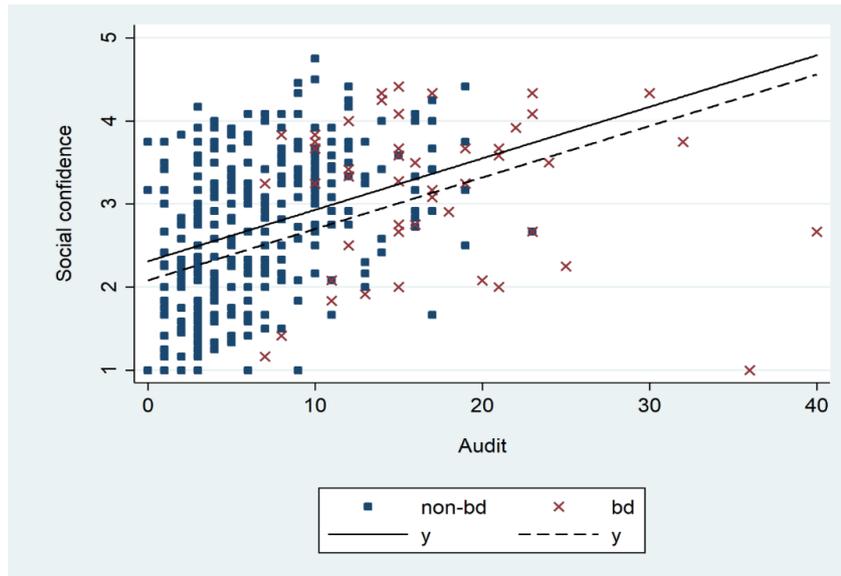
	Model 1 conf	Model 2 conf	Model 3 conf
audit	0.0622*** (0.00896)	0.0865*** (0.0104)	0.0915*** (0.0117)
bd	-0.229 (0.152)	0.921** (0.304)	1.077** (0.339)
bd#audit		-0.0835*** (0.0192)	-0.0960*** (0.0212)
gender			0.00857 (0.107)
age			0.0283 (0.0293)
income			-0.101 (0.0797)
_cons	2.311*** (0.0756)	2.149*** (0.0826)	1.647* (0.642)
<i>N</i>	366	366	303
R^2	0.139	0.182	0.194
adj. R^2	0.134	0.175	0.178

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

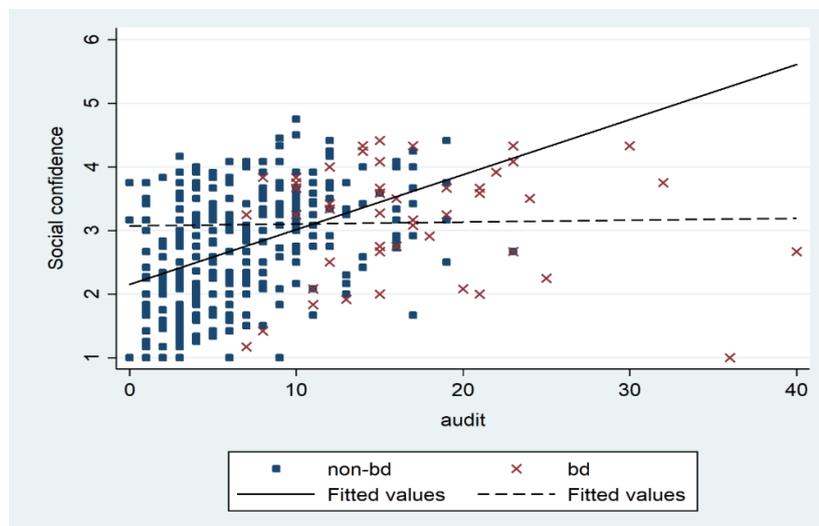
Model 1 shows that in both groups higher level of alcohol consumption (AUDIT score) leads to higher level of expectancies of ISC. Initial levels of positive alcohol outcome expectancies measured by ISC is slightly lower in binge drinking group, therefore the regression coefficient of binge drinking is negative, but difference is not significant. Model 1 explains 13.4% variance of ISC and is graphically depicted on Figure 1.

Figure 1. Graphical representation of Model 1



Model 1 is based on the assumption that the differences among groups are related only to intercepts while slopes are same for both groups. This means that increased alcohol consumption influences the expectancies of ISC in both groups in the same way. That's why a regression lines are parallel on Figure 1. However, it is possible that this assumption does not hold in reality, as increased alcohol consumption potentially doesn't influence ISC as positive alcohol outcomes in the same way those who are binge drinkers and those who are not binge drinkers. With the purpose to test this assumption the second Regression model was built to examine potential moderating effect of binge-drinking behavioral patterns. Therefore, the next question is does binge drinking behavioral pattern moderate relation among alcohol consumption score -AUDIT and level of positive alcohol outcome expectancies - ISC. In order to address this question, we created Model 2 which has confirmed significant moderating effect of binge drinking behavioral patterns. Model 2 explains 17.5% of variance in dependent variable – expectancies of ISC. Described Regression model is graphically illustrated on Figure 2.

Figure 2. Graphical representation of Model 2



From Figure 2 we can see that young people in non-binge drinking group have low expectancies of ISC when alcohol consumption is low (AUDIT = 0). However, this low

starting level of ISC expectancies becomes to rise as alcohol consumption increases. On the other hand, starting level of ISC expectancies in binge-drinking group is higher when alcohol consumption is low (AUDIT = 0), but with increased alcohol consumption this starting level of ISC expectancies remains unchanged. In other words, increased alcohol consumption has no influence on the level of ISC expectancies in binge drinking group. After confirming existence of moderating effect of binge drinking on relationship between alcohol consumption and ISC expectancies, we expanded our model with inclusion of socio-economic variables: gender, age and income (Model 3). It can be noted that moderation effect remained mostly unchanged. Signs are the same as in the Model 2, and none of the included socio-economic variables have influence on dependent variable. Model 3 explains 17.8% of variance in dependent variable of ISC expectancies.

4. Discussion and conclusion

Theoretical backgrounds of several studies have positioned alcohol outcome expectations as a predictor of drinking behavior. Those expectation dimensions actually describe desirable state of mind, feelings and moods both during alcohol consumption, and as a consequence of alcohol consumption. In the line with motivational theory, binge drinking is behavioral result of motivated decision process. This study has confirmed that binge drinkers have higher motivation level to express drinking behavior. From the point of motivational theory personal experience in alcohol consumption can change the perspective, and consequently, drinking behavior can become an instrument of gaining expected outcomes. Therefore, the main purpose of this study was to understand behavioral patterns in drinking in accordance with positive alcohol outcome expectations.

The result of this study confirmed that there is a high level of positive alcohol outcome expectancies especially in the case of young people who experienced binge drinking behaviors. The overall analysis addressed the question: does behavioral experience in drinking alcohol affects positive outcome expectancies? The current analysis supports the conclusion that alcohol outcome expectancies are changed in accordance with personal drinking experience. Observing alcohol consumption continuum measured by AUDIT in interaction with binge drinking behavioral patterns it can be seen that binge drinkers hold higher level of positive alcohol expectancies in comparison with non-binge drinkers. But the main conclusion is that there is a marginal point where binge drinking behavior doesn't affect positive outcome expectancies. In other words, repeating heavy drinking behavior doesn't lead to higher positive outcome expectancies. This fact provides a conclusion that binge drinkers are aware that gaining those positive outcomes is of temporary character linked with a drinking situation which actually doesn't contribute to the positive self-esteem in a permanent manner. On the other hand, in non-binge group more behavioral experience in drinking influence higher level of positive outcome expectancies. This means that young people with lower level of drinking experience believe that more intensive drinking leads to gaining positive outcomes. This result is very important in prediction of further behavioral patterns and prediction of hazardous drinking habits of those groups with lower starting level of drinking experience.

Since binge drinking and excessive alcohol consumption are relevant public health problems in many countries including Bosnia and Herzegovina, this study offers a contribution for better understanding of binge drinking occurrence framework and therefore some possible guidelines for social marketing campaigns aiming at minimizing such drinking behavior among young population. Some studies reveal that interventions challenging alcohol expectancies may lead to reductions in alcohol consumption. A study by Scott-Sheldon,

Terry, Carey, Garey and Carey (2012) found that these interventions i.e. the participants reported lower positive alcohol expectancies, reduced their alcohol use, and reduced their frequency of heavy drinking. These campaigns, as it can be seen in this study, should concentrate on lowering drinking expectations and pointing out different approaches to build self-esteem in ways different than alcohol consumption. For example, Kubacki, Siemieniako and Rundle-Thiele (2011) recommend efforts to improve self-confidence and self-esteem through other means and believe that colleges and universities can help by providing a mix of sport and other social activities where the role of alcohol in facilitating social interaction is minimal at best. Taking into account the importance of positive alcohol expectancies, especially in the social sphere, instead of supporting supply and demand reduction, this study supports a harm-minimization approach based on alcohol education and the promotion of 'safer' or more 'sensible' drinking. From the other hand, results of this study also reveal as crucial to detect critical paths of direct and indirect influences that actually build positive alcohol outcome expectancies, as well as influence of particular reinforcing effects as the outcome of performing drinking behavior.

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The Evolution of Virtual Trade Shows: A Literature Review from the UK Medical Device Industry

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Abstract:

Conventional medical device trade shows have been held at global geographic locations, serving as a primary marketing mechanism for communicating promotional activities, highlighting industry trends, encouraging collaborations to influence buyer behaviour. The concept and evolution of virtual trade shows as commercial platforms enable the facilitation and collaboration between industry buyers and sellers, virtually anywhere, at any time. This study firstly offers literary research, discussing and evaluating medical industry perceptions and reactions toward participating in virtual trade shows in contrast to conventional trade shows. Secondly, the study contributes to existing literature through outlining virtual trade show relationships and their value creation.

Keywords: *trade show, technology, medical device*

1. Research Gap

Medical device organisations continually face an increasingly dynamic and competitive landscape; requiring flexible, reactive and efficient strategic marketing responses to ensure organisational continuity and survival. Their marketing strategies have needed to carefully consider their decisions pursuant to advancing the objectives of the organisation (Argenti & Barnes, 2009). In this regard, for medical device organisations to achieve their goals and objectives, adjusting their conventional marketing strategies becomes increasingly critical within a dynamic competitive environment (Pearce & Robinson, 1997).

By participating in conventional trade shows offers a significant and powerful marketing tool for medical device organisations to establish and cultivate buyer-seller relationships, (Sharma & Patterson, 1999). Such trade shows offer the opportunity for medical device exhibitors to interact and engage with delegates through direct advertising, promotional activities and direct buyer-seller engagements. Trade shows are, however, considerable marketing investments. They require substantial resource, effort and commitment to compete within an increasingly saturated market.

A progressive annual decline between 2015-20 in United Kingdom (UK) in conventional trade show interest may be attributable to several factors including industry budgetary constraints, workload demands, inaccessible locations or travel limitations (Google, 2020). This decline follows from the 2008-09 decline due to the global economic recession (Gopalakrishna & Lilien, 2012). Compounded with the recently identified COVID-19 viral pandemic, resulting in global event cancellations and postponements for preventative individual infection control through community isolation, travel restrictions, social distancing and practicing of personal aseptic techniques. Both buyers and sellers may be socially isolated or travel restricted, but still likely to have access to both information technology (IT) resources and the internet. This represents an opportunity for medical device organisations to consider substitute marketing strategies for socially isolating buyers. Medical device organisations are constantly looking for alternative cost-effective marketing strategies to promote and champion buyer-seller engagements, which may otherwise be restricted from cancelled or postponed conventional trade shows including expanding online collaborations and virtual trade shows.

This proposed study seeks to establish whether virtual trade shows offer an effective alternative marketing tool to satisfying the strategic marketing and organisational objectives for participating UK medical device organisations.

1.1 Research questions

The research questions for this specific study include:

1. What are the organisational perceptions of participating in conventional trade shows?
2. Would medical device organisations achieve their marketing objectives by participating in virtual trade shows?
3. What factors influence organisations to attend virtual trade shows?

2. Introduction

The medical device market is an innovative, heterogenous and dynamic industrial sector; designing, developing and manufacturing a tremendous variety of healthcare products ranging from single-use surgical masks to cardiac stents and diagnostic imaging devices. The medical device industry is crucial toward developing innovative medical technologies to diagnose, improve and treat illness, (Bayon et al, 2016). Medical devices are classified into general, in-vitro and active/implantable devices and further sub-categorised into four classes (I, IIa, IIb, and III) depending on application, usage and inherent risk (MHRA, 2016).

According to the Office of National Statistics (ONS), the UK public sector expenditure in 2019 on healthcare was £152.9 Billion GBP. This compares with 2000 when UK annual expenditure was an £50 Billion GBP, doubling to £100 Billion in 2008 in real terms. This represented 5.1% of UK Gross Domestic Product (GDP) in 2000, increasing to 7.2% of GDP in 2019, (ONS, 2020). The medical device industry is an alternative, highly regulated enclosed industrial sector, differing from traditional industrial sectors in terms of marketing and promotional activities due to its own specific features. With end users being medical practitioners and healthcare professionals, end products may be large, scientifically complex, proprietary and unavailable to the general public. The regulation of medical device therapeutic claims, proprietary information and restricted license usage (MHRA, 2016) presents significant marketing strategy challenges.

With intense global competition, medical device organisations exploit a multitude of marketing tools and techniques to become successful. Dekimpe et al, (1997), describes organisations' adoption of trade shows as a significant and powerful marketing tool toward brand promotion, directly affecting and influencing commercial purchasing decisions.

Medical device organisations recognise trade shows as a significant marketing tool, complementing their existing marketing mix and significantly influencing their ability to position and compete in the global market, (Seringhaus & Rosson, 1998). Trade shows serve as a significant and powerful marketing tool, cumulating and cultivating buyer-seller relationships to promote interest and engagements, (Sharma & Patterson, 1999). Campbell and Keller (2003) suggest each attendee has an objective for participating in trade show events; by registering and attending, each attendee seeks to fulfil and satisfy their requirements, having invested time, effort and resources in order to attend. Recently, the concept of virtual trade shows has emerged following the development of e-commerce and advancing information technology. Virtual trade shows are defined as online business platforms offering sponsoring and exhibiting medical device organisations the opportunity to engage with targeted attendees and present their business, products and services. Such organisations advertise within a virtual trade show platform and engage with participating attendees, registering interest and engagements in addition to offering professional guidance and direction toward their commercial websites.

These virtual trade shows offer sponsoring medical device organisations and attending delegates the opportunity to connect virtually on a single business platform together at any time and from any location. Similar to conventional trade shows, attending delegates can participate in virtual workshops, guest lectures, chatrooms and attend conference halls to interact with sponsoring organisations. Consumer engagements and interactions with medical device sponsors are provisioned virtually without direct physical human connection with interactions comprising text, data, audio and visual exchanges. Previous literature research has suggested the evolution of virtual trade shows offer a supportive commercial marketing

function, extending buyer-seller self-interest and fulfilment of their individual requirements at trade shows. Empirical studies offered from Breiter and Milman (2006) have shown consumer interest, participation and engagement are not confined to conventional trade shows and direct commercial engagements. Likewise, Gottlieb and Bianchi (2017) describe buyer-seller interactions as advancing alongside developing technologies, extending into virtual industrial communities alongside mobile, social networking and virtual forums. This implies buyer-seller relationships are dynamic, with interactions having the potential to evolve with developing technologies.

2.1 Research objectives

The research objectives for this specific study are threefold; firstly, to determine the effectiveness of conventional trade shows as an element of the marketing mix. Secondly, to compare the constraints, limitations and success factors between conventional and virtual trade shows. Finally, determine and discuss factors influencing medical device organisations decisions to participate in virtual trade shows.

3. Literature Review

3.1 What are the organisational perceptions of participating in conventional trade shows?

The UK National Healthcare Service (NHS) is widely regarded as a traditional public healthcare provider and a prized status symbol, with the UK government supporting healthcare manufacturers for the provision of medical, clinical, diagnostic and surgical products and services. Medical device organisations have sought to establish and develop transnational networks, partnerships and relationships on a multitude of levels including formal, informal, integrative, and sub-contracting engagements. These new cooperative relationship building strategies between medical device organisations, consumers and governments have started replacing ad hoc engagements, (Nanay, 2013). Existing literature has recognised the importance, application and effectiveness of organisations' engagement efforts, particularly toward marketing and participating within trade shows as an effective communication medium, (Gottlieb & Bianchi, 2017). Previous literature research toward medical device trade show attendances addresses communications, (Bayon et al, 2016), (Argenti & Barnes, 2009), (Gottlieb & Bianchi, 2017); motivation, (Godar & O'Connor, 2001); delegate behaviour (Money et al, 2011), (Breiter & Milman 2007); and performance, (Ling-Yee, 2007).

A substantial body of research have explored the determinants and dimensions of the delegate decision making process for attending trade shows and their underlying motivations (Lee, Dewald and Yeung, 2010). Empirical studies ultimately suggest primary motivational factors for delegates attending trade shows are for information research and market investigation, (Lee, Dewald and Yeung, 2010). Contrastingly, earlier observed motivational factors explored by Mair consider personal and professional development, networking, relationship building and keeping up with industry trends as key characteristics of trade show delegates, (Breiter & Milman, 2006). There are numerous key success factors of conventional trade shows compared to alternative promotional activities for both attending exhibitors and delegates. Trade shows target audiences with resultant direct sales opportunities, in addition to offering lead generation potential for medical device exhibitors. Participating in trade

shows offers exhibitors the opportunity for immediate buyer engagement and seller follow up, free of interruption or delay and cumulating specialist input.

Trade shows encourage practical experiences for delegates, inviting participation in demonstrations, social interaction and supported with a high ratio of buyer:seller exposure, (Kellezi, 2014). In addition, the locality of a trade show at a specific geographic location may harmonise with a local exhibitor, having regional offices within the vicinity may further encourage delegate engagement and site visitation, (Han & Verma, 2014).

By distinction, the drawbacks of conventional trade shows consider substantial exhibitor investment, time and resource commitment are required. An estimated £40 Billion GBP is invested annually by exhibitors attending over 1.3 million conferences and events hosted in the UK, (Booker, 2020). Competing medical device exhibitors may experience direct competition for trade show delegate engagements. Delegates perception of quality and offering between competing display stands may seek to differentiate exhibitor superiority.

Delegates perceiving an exhibitors' display stand as inferior may tarnish that organisation's reputation and brand, (Bello, 1992). Conventional trade shows attract a wide variety of delegates, potentially attracting an audience unsuitable for exhibitors. Local events may compete and attract target audiences away from trade shows, outside of exhibitor influence. Medical device exhibitors may be unsuccessful in attracting qualified delegates to display stands, irrespective of quality, size and offering if the target audience is limited. This may negatively impact buyer:seller trade show engagements, attracting higher financial costs, offer limited return on investment (ROI) and challenge future exhibitor resource commitment.

This supports the previous research by Cop and Kara (2014) concluding that high trade show participation fees and an unfavourable location are the largest contributors to low delegate attendance within the medical device industry.

3.2 Would medical device organisations achieve their marketing objectives by participating in virtual trade shows?

Contrary to popular perception, online communication and virtual meetings are widely prevalent, powerful and vital for organisational survival, (Han & Verma, 2014), and extend to nearly all elements of an organisation's marketing tools. Conventional trade shows, by contrast, typically retain a traditional format but take advantage of developments in technologies by offering additional channels of communication to support strategic marketing and promotional activities. This was further explored by Lee and Carter (2012, page 377), stating "trade shows are one of the most effective ways of understanding international competition and keeping abreast of technologies and new trends".

Developing technologies continue to influence current marketing activities (Yesawich, 2000), supporting conventional trade shows with the application of email, online registration, and live virtual customer service support. Technology continues to support trade show and exhibitors' marketing capabilities by capturing registrant's data, professional specialism, commercial interest and social media profiles, thereby enabling exhibitors to offer bespoke advertising to further engage with prospects and consumers. Developing technologies have become more accessible, affordable, and interactive; offering greater features and functionalities to further connect and enhance user experiences, (Klaus & Maklan, 2013).

Virtual trade shows are built on an online platform as an extension of virtual marketing activities, employed by organisations to compete in the current marketplace, (Talukder & Yeow, 2006). These existing technologies offer a foundation and framework to support virtual collaborations. Current technologies deployed at conventional trade shows

including wireless internet capability ("wifi"), virtual reality simulations, touch screen audio-visual displays and near field communications ("NFC"). This supports the evaluations of Chiou, Hsieh and Shen (2007) examining the application of developing technologies toward trade show strategy and demonstrating there is no measurable impact on trade show performance.

A virtual medical device trade show may include a live online exhibition hall, workshops, and chatrooms, permitting users access to select areas with specific permissions, (Remolar et al, 2015). A conventional medical device trade show format by contrast would not be practicable to replicate in a virtual trade show framework as highlighted by Chaffey (2010), with conventional medical device trade shows showcasing physical medical products or sensitive scientific technology, inapplicable to offer in a virtual environment.

3.3 What factors influence organisations to attend virtual trade shows?

As medical device organisations are acutely aware- participating in trade shows is one step in the long decision-making process of procurement (Bello, 1992). They remain optimistic of virtual trade show potential as a sales-generating tool. Medical device organisations offering capabilities to participate in virtual engagements following direct investment and implementation of new marketing activities would thereby create a defined competitive advantage, (Martínez-López, 2013). Many medical device organisations have experienced a cross-over between information and marketing technologies, already possessing existing telecommunications, information technology and near-field communications enabling medical device suppliers to almost seamlessly deploy and enhance their presence in virtual marketing engagements. Medical device organisations who previously resisted technology adoption, are under resourced, or have misaligned marketing and organisational strategies may be disadvantaged and challenged to respond effectively to consumer interest and requirements. Ultimately, this could influence and potentially detract consumer engagement, create dissatisfaction and remove brand loyalty, (Kaufmann, 2014).

By improving communication, promotional engagement activities and marketing strategies, medical device organisations could build stronger and more resilient interdepartmental relationships between both strategic management and marketing teams to develop competitive advantages from a combination of developing technological and marketing capabilities, (Yadav & Pavlou, 2014). This offers a distinct advantage for medical device organisations to participate in virtual trade shows over conventional trade shows, empowering both international exhibitors and delegates the opportunity to overcome language barriers and enable convenient conversations with the assistance of translation technology services.

Virtual trade shows offer the provision of education services and prompt access to Subject Matter Experts (SMEs), which may not be available at conventional trade shows or in immediate follow up buyer discussions. Similarly, the provision of delegate Key Performance Indicators (KPIs) and engagement reporting metrics by medical device organisations have presented as challenges at trade shows. Typically, limited delegate registration data is captured at conventional trade shows, however with virtual trade shows, considerable delegate information is captured and stored online including workshop attendances, chatroom conversations, promotional material tracking and sharing. Gottlieb and Bianchi (2017) support establishing KPIs for brand development is critical in virtual engagements for brand generation, promoting awareness toward developing organisational creditability and trust.

The cost savings of participating in virtual trade shows in comparison to conventional trade shows is significant and measurable. In addition to conventional trade show sponsorship and registration costs, including booth rental, event staffing and promotional material

generation, consideration for additional cost savings toward staff/visitor travel, accommodation and sustenance expenses should also be included. As conventional international trade show locations attract global medical device organisations to participate and exhibit, the high associated travel and accommodation costs may prohibit organisations from extending trade show attendance to prospective visitors and SMEs, (Santos and Mendonça, 2014). This may result in removed specialist staff resources from the trade show and their absence to participate, engage and support buyer-seller discussions. Virtual trade shows offer the capability to support prospective visitors and SME engagements from any time zone or location without associated travel/accommodation costs. Attending SMEs may strategically align and support both marketing and organisational objectives to enhance buyer:seller discussions, gather market intelligence and offer professional education services.

The attendance of a third-party specialist or SME to a trade show can introduce a degree of independence for buyers, creating a perceived segway between buyers and sellers, (Santos & Mendonça, 2014). This helps build trust between buyer and seller, with mediating SMEs perceived as independent, trustworthy and creditable, offering professional guidance and direction to potential buyers as opposed to sales focussed organisational representatives.

Conversely, the main challenges and constraints of medical device organisations participating in virtual trade shows may include difficulty in determining the effectiveness of interactions between delegates and exhibitors. Communication misinterpretation, technological challenges, and lack of social interaction may confound the effectiveness of virtual trade show interactions in addition to the potential threat of online intruders. Poor social etiquette, miscommunication, vulgarity and unprofessionalism may also occur in an online social environment. Virtual moderators may be required to regulate content and discussions, thereby modifying discussions and limit the full capacity of developing open virtual relationships.

Another constraint of international virtual trade show participation, as suggested by Kaushik and Rahman, (2015), is the technological capability, adequate IT resources, internet access, and sufficient bandwidth required to support online attendance, particularly in developing international regions. This is further compounded with virtual trade show required minimum IT standards for data transmission and system stability. System administrators may be required to offer online assistance, direction and user coaching. These constraints could challenge and limit delegate-exhibitor contact time, challenge participation and disrupt discussions.

The creation of a positive virtual trade show buyer experience, supported with effective marketing, encourages buyer participation and opens dialect between buyer and seller, adding value to the virtual experience, (Sheng & Zolfagharian, 2014). Ultimately, the creation of a positive experience along the sales cycle that exceeds buyer expectations creates consumer satisfaction, promotes brand loyalty, and drives profitability.

4. Conclusion

Conventional trade shows offer a significant and powerful marketing tool for organisations to establish and cultivate buyer-seller relationships, interacting with attendees through direct advertising, promotional activities and buyer-seller engagements. Conventional trade shows are expensive and require substantial resource, effort and commitment for a potentially uncertain return on investment. Medical device organisations are constantly

looking for alternative cost-effective marketing strategies to promote and champion buyer:seller engagements beyond conventional trade show attendances.

By contrast, virtual trade shows are built as an extension of online marketing activities, constructed from a framework of conventional trade show offering, (Argenti & Barnes, 2009). Equivalent existing technologies deployed at conventional trade shows parallel technologies offered in virtual trade shows and online business platforms, (Martínez-López, 2013). Medical device organisations adopting existing technologies and resources could seamlessly transition and participate in virtual trade shows, extending their online consumer collaborations. By participating in virtual trade shows, medical device organisations could demonstrate enhanced consumer engagements, promote consumer satisfaction and drive brand loyalty, (Kaufmann, 2014).

The main drivers for medical device organisations participating in virtual trade shows following literary research suggest expanding market access, increasing sales revenue, higher return on investment, and promotion of brand loyalty are leading contributors. By improving communication, promotional engagement activities and marketing strategies, medical device organisations could build stronger and more resilient interdepartmental relationships between both strategic management and marketing teams to develop competitive advantages from a combination of developing technological and marketing capabilities. Significant cost-savings, immediate access to SMEs and technological effectiveness are identified as the main advantages of virtual trade shows in comparison to conventional trade shows. Detailed literature research findings suggest international technological access, reliable ROI measures, and difficulty in assessing virtual trade show key performance indicators challenges present the main constraints of virtual trade shows.

Strategically, the advantages and sustainability of virtual trade shows may not be fully utilised and challenged by medical device organisations if cost advantages, capabilities and industry direction are not recognised. The healthcare industry is invited to further explore virtual trade show capabilities, features and functionalities as an innovative concept toward future trade show direction.

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Perception of Privacy in the light of GDPR

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Abstract:

GDPR is the general data protection regulation of the European Union, which aims to harmonize legislation related to privacy and personal data in Europe. The regulation contains the protection of users' personal data, and to change how different organizations should process these data. Legal regulation presumably changes internet users' privacy-related attitudinal and behavioural characteristics. The empirical research sheds light to the perception of general privacy and GDPR among university students. The study was conducted one year after GDPR took effect, which was assumed to be enough time for users to consciously perceive its significance.

Keywords: *GDPR, privacy, user perceptions*

1. Introduction

In the past 10-15 years the development of technology and the social changes challenged and challenge the data regulation formed in the end of 1990s. Contents generated and published by users significantly expanded the quantity of online data. Big data came into view and appeared in the data regulation literature, too. Likely that these tendencies contributed to the present EU regulation, which shift the emphasis from individual rights to the responsibility of data users. Thus, the regulation instead and next to the individual informational self-determination rights and individual data consciousness emphasizes the data managers' duties, responsibilities and accountability.

The EU General Data Protection Regulation (GDPR) is the most important change in data privacy regulation in 20 years, replacing an outdated data protection directive from 1995. The European Parliament adopted the GDPR in April 2016. The regulation entails provisions that require businesses to protect the personal data and privacy of EU citizens for transactions that occur within EU member states. According to the regulation, enterprises that collect data from citizens in EU countries will need to comply with strict new rules around protecting customer data by May 25, 2018 (Geospatial World, 2018). So, we did our research in the first anniversary of GDPR to see any possible changes in users' attitudes and consciousness. The exact text of the regulation has been available in all official languages of the EU since 2016 (EU, 2016). The regulation was published 2 years before its application, which could provide time to the organizations to prepare the new regulation about privacy and personal data. The regulation contains a lot of details about privacy and personal data management (including recording, collecting, storing, using, transferring or modifying those data) and provide the definition of personal data. Personal data is any information that relates to an identified or identifiable living individual. Different pieces of information – which were collected together – can lead to the identification of a particular person who also constitutes personal data. Personal data that has been de-identified, encrypted or pseudonymised but can be used to re-identify a person remains personal data and falls within the scope of the GDPR (EC, 2019).

According to the Hungarian Act CXII of 2011 on information self-determination and freedom of information 'personal data' shall mean data relating to the data subject, and data' processing' shall mean any operation or the totality of operations performed on the data, irrespective of the procedure applied in particular, collecting, recording, registering, classifying, storing, modifying, using, querying, transferring, disclosing, synchronising or connecting, blocking, deleting and destructing the data, as well as preventing their further use, taking photos, making audio or visual recordings, as well as registering physical characteristics suitable for personal identification (Act CXII of 2011).

As a regulation GDPR is not a directive, thus compliance is mandatory, without the need for each member state to ratify it into its own legislation. The GDPR expands the scope of data protection so that anyone or any organization that collects and processes information related to EU citizens must comply with it, no matter where they are based or where the data is stored. Cloud storage is no exception. Moreover, the definition of personal data has also been expanded too. It states that personal data includes information from which a person could be identified, either directly or indirectly. Consumers must unambiguously give their consent for their data to be processed, which must be informed and voluntary (Tankard, 2016).

This law was implemented in order to ensure a consistent and high level of protection of natural persons and to remove the obstacles to flows of personal data within the Union. So, the level of protection of the rights and freedoms of natural persons regarding the processing of such data should be equivalent in all Member States. Effective protection of personal data throughout the Union requires the strengthening and setting out in detail of the rights of data subjects and the obligations of those who process and determine the processing of personal data,

as well as equivalent powers for monitoring and ensuring compliance with the rules for the protection of personal data and equivalent sanctions for infringements. Because rapid technological developments and globalization have brought new challenges for the protection of personal data. The scale of the collection and sharing of personal data has increased significantly (EU, 2016).

The GDPR is established to create consistent data standards and protect EU citizens from potential privacy abuses. The implications and ramifications are enormous, and the initiatives reach global scale. Consumers are allowed to file complaints with each EU national data protection authority, which will investigate the claim. So GDPR change the way data collection takes place to the way corporate databases are designed and used, because the regulation allows consumers to remove themselves from a database or online source at any time. Companies violating GDPR face fines of up to 4% of their global annual revenues (Greengard, 2018). So, the digital footprints could be removed by consumers, which could have a significant impact how personal data is stored, used and transferred online, like cloud storages.

Beside the legal regulations we consider the perception of these regulations is also a significant issue. In our paper we also include the perception of privacy and privacy policies as we believe that it influences the perceived risks about misuse of personal data is related to that issue.

2. Law and Perception

Perception is the process how people select, organize, and interpret information inputs to create a meaningful picture of the world. create a meaningful picture of the world.³⁹ It depends not only on physical stimuli, but also on the stimuli's relationship to the surrounding environment and on conditions within each of us. People emerge with different perceptions of the same object because of the perceptual processes. These processes could be selective attention, selective distortion, and selective retention, because people cannot possibly attend to all stimuli, so their attention select their focus, distortions can happen due to how people interpret information in a way that fits their preconceptions, and likely to remember good points about what their like (Kotler & Keller, 2012). Therefore, in this study we focused on individuals, as the regulation has an objective legal impact, but the individual perception of its effects can be different by users.

Adjerid, Peer, and Acquisti. (2018) found in their study that users were more satisfied with security measures and were less worried about privacy protection-related issues by high perceived Internet security measures. At the same time, they had less concern that their provided data would have adverse effects on them. However, respondents who could expect a low level of protection of their privacy provided significantly fewer personal data. Relative and objective risks are capable of influencing people's behaviour in connection with privacy protection. Nevertheless, they also concluded that objective changes have a diminishing effect on risk between the theoretically possible and the actually applied settings, i.e., they are more essential than the theoretically possible settings. The role of relative risks, in contrast, increases between the theoretically possible and the actual settings, therefore, the effect is stronger by the actual settings (Adjerid et al., 2018). Therefore, changes in the legal framework referring to privacy protection and striving to make users' data management safer may eventually have an impact on the sharing of users' personal information in the online space. Based on this, it is worth analysing what actual changes the regulation caused in users' security-related perception, and there also may be grounds for the analysis whether the introduction of GDPR can play a role in increased consumer confidence in the long term.

The issue of regulation and perception is relevant, because in a last year's publication, Fox and Royne (2018) concluded that users' fears about personal data management are stronger when the information includes voices or images, than in the case of solely texts. Information containing either voices or images draws user's attention more to privacy protection. However, nowadays most websites inform users about their data management policy exclusively with texts (Fox & Royne, 2018). At the same time, Schmeiser's results confirm that a considerable number of users are not interested in the impacts on their privacy in the online space, which may derive from advertisements and applied technology solutions. Users who often install related extensions on Internet browsers pay more attention to the protection of their privacy. The application of ad networks and technologies tracking consumer behaviour may increase users' confidence in websites, although the reason for that may also be the users' ignorance about the applied technologies and that more visited websites automatically enjoy greater user confidence (Schmeiser, 2018). Consequently, users' information and education related to the protection of their privacy and their personal data may be a relevant issue in which the creation of GDPR can be interpreted as a possible legislative step. An interesting issue in the future may be the creation of additional rules which do not necessarily draw users' attention to data management practice and setting options with only texts.

3. The Possible Added Value of the Theory of Planned Behaviour to the Issues related to Privacy Protection

The appearance of concerns related to privacy protection in the literature is a relatively well documented area (Williams, 2018), where Internet users' concerns are constantly present. Still, despite this, they share their sensitive personal data, and allow third persons to have access to these data. With the spread of smartphones, a new tool became available for users, through which a substantial part of their activities necessary for life can be performed, everything from mobile payment through telebanking services to social media activities, and all this is complemented by a user behaviour which – partly because of usage patterns and characteristics changed by social media systems – distracts users from the consumer behaviour formed by the usual principles. Of course, organisations can stand up against this, or regulations similar to GDPR can be introduced, but the question is still if it is the change of the external regulatory environment which primarily contributes to users' awareness, or the internal, organic way which, with the change of user interface (UI) can authorise users by informing them about their possibilities on the interaction platforms and can remind them of their concerns in connection with the protection of their privacy, thereby drawing their attention to the possible dangers arising from the access to personal data.

The scientific analysis of this problem was carried out by Hughes-Roberts and Kani-Zabihi (2014), where the authors approached the theoretical background of the topic through the Theory of Reasoned Action and then its complemented model, the Theory of Planned Behaviour (TPB). The Theory of Planned Behaviour was created with the modification – adding the perceived behavioural control to the model – of the Theory of Reasoned Action model. In the case of the latter one, several studies found that attitude and subjective norm do not completely describe behavioural intention, and then other researches highlighted that another factor was missing, which was named perceived behavioural control (Madden, Ellen, & Ajzen, 1992). According to the theory, attitude towards behaviour, subjective norm and perceived behavioural control lead to the formation of the intention to act (Ajzen, 2002). The Theory of Planned Behaviour may help to understand consumer behaviour, provided that the research focuses on the psychological background of privacy protection and on which influencing factors determine the behaviour-related factors (intention and action). Based on the analysis of Hughes-Roberts and Kani-Zabihi (2014: 226), users, who built privacy protection-related information

into the user interface published considerably less information than the participants of the control group in their experiment.

If we examine which characteristics describe the features of attitude and behaviour concerning users' privacy protection with the appearance of the Internet, it is worth taking into consideration that users share personal information (for example in the case of a type of social media, i.e. on personal social networks, e.g. Facebook) with each other almost indiscriminately, or at least in very uncontrolled circumstances during everyday use. The privacy protection-related paradox which reflects the typical results of the related researches reveals the interesting correlation that users' intention – especially on social networks – does not reflect their online behaviour (Acquisti & Gross, 2006). This paradox may stem from several reasons, including users' ignorance of the consequences of their actions (related to privacy protection), and users' ignorance of the system they use and whose conditions of use they accepted (Alashoor & Baskerville, 2015).

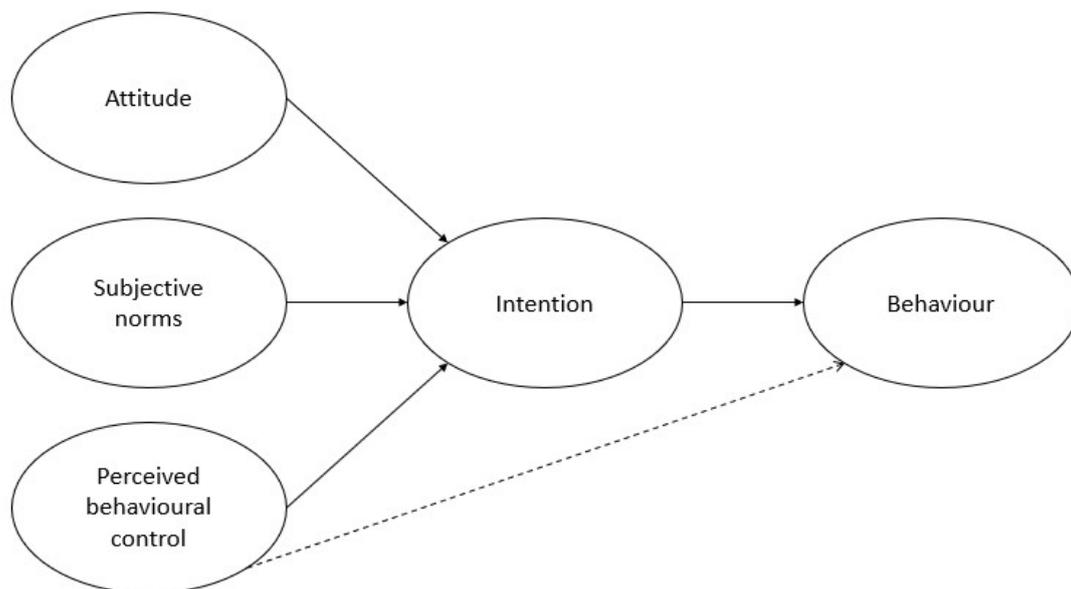


Figure 1. Attitudinal and behavioural elements based on the Theory of Planned Behaviour in the context of privacy

Source: own elaboration based on Madden et al. (1992) and Hughes-Roberts & Kani-Zabihi (2014)

To interpret Figure 1, the concepts of its constructs are going to be presented as follows. The concept of the attitude towards behaviour is the perception of the knowledge related to the consequences of behaviour, meaning whether the person has a favourable or an unfavourable opinion of the given behaviour. Subjective norms are factors representing the perceived social pressure in connection with the actual execution of the behaviour. Perceived behavioural control means the ease or difficulty in executing the behaviour, which is formed by the experiences gained in the past and considering the predicted difficulties (Ajzen, 2002: 666-667.). The Theory of Planned Behaviour may therefore be able to forecast the actual, personal data protection-related behaviour – and the extent of the preceding intention to act – of persons to be examined (Internet users) in a social media environment, in accordance with the defined conditions. The connections explored by the Theory of Planned Behaviour may be of great help in revealing the influencing effect of the external regulatory environment related to the GDPR regulation.

4. Empirical Research and Methodological Considerations

It can be said that data collection was carried out in the form of an online questionnaire, and since the topic examines online consumer behaviour among users, this method seemed to be appropriate. The statistical analysis of the structured responses could be done with the questionnaire. In addition, the online survey makes it possible to do fast and large-sample data collection. Data were analysed with SPSS 25.

The questionnaire survey was carried out between April 26 and May 8, 2019, because it was assumed that this period of nearly one and a half weeks would provide a large number of responses, and at the same time it would be a time interval short enough to minimize potential bias. Voluntary sampling was applied. Since respondents are university students from Hungary, results cannot be considered as representative. However, results are likely to show exciting tendencies related to the topic. At this point it must be mentioned that the selected sample differs from the average population in terms of certain characteristics. As regards digital literacy, for example, they have much higher values, furthermore, their general education, reading literacy and abstract reasoning are much more developed as compared to the average values of the society. Based on this, it has to be highlighted that the generalisability of the results is limited due to the characteristics of the sample, because of the indicated reasons. During the research, already tested international models and scales are applied, of which results relevant to GDPR are presented in this study. This is primarily represented by the application of Fox and Royne's (2018) privacy protection-related scales and their adaptation to the context of GDPR.

After data cleansing the examined sample contained 606 people. 40.1% of the sample were men, while 59.9% were women. Considering the characteristics of the sample, it can be said that respondents were predominantly born in the years 1998-1999 (75%). The majority of respondents live in the capital [(56.6%, but the presence of the agglomeration of Budapest is also significant (10.4%)], while 12% live in county seats and 15% in other towns. Consequently, the examined sample can basically be characterised as a group of young adults living in towns and cities. In terms of perceived financial circumstances, the majority perceive their financial circumstances to be average (46.2%), while others rather have above-average values. The percentage of respondents indicating perceived financial circumstances slightly (38.6%) or significantly (7.4%) above average is much higher than the percentage of respondents with values slightly (6.6%) or significantly (1.2%) below average.

5. Privacy and GDPR Perceptions

First, respondents were tested whether they know what does the abbreviation GDPR mean, where they had to select the right definition among 4 alternatives. The vast majority of the respondents gave the right answer (83.2%), but at the same time it indicates that cc. every sixth of them were not aware of the term (16.8%). After this question, every respondent could read a short description of the meaning and content of GDPR to have a general image of user perception in this issue.

In the case of questions related to GDPR regulation respondents had to declare their subjective judgement about GDPR data privacy policy. They had to decide about their attitudes towards GDPR regulations related to the people they know. Distribution of results is shown in Table 1.

	Absolutely disagree	Rather disagree	Neutral	Rather agree	Absolutely agree
I fully understand GDPR's privacy policy.	2.8	14.5	30.4	43.6	8.7
I understand the terms used in the GDPR.	3	18	29.7	41.3	8.1
I am confident in my understanding of the GDPR.	4.5	23.1	38.4	29.4	4.6
I understand how my information will be used according to GDPR.	3.5	23.3	30.5	37.1	5.6
I understand enough about the GDPR to feel confident about my actions on the site.	4.3	15.8	28.2	43.2	8.4
I am knowledgeable about how my information will be used according to GDPR.	9.6	31.7	31.2	23.6	4
I could explain GDPR to others with confidence.	24.1	38.3	25.4	10.7	1.5

Table 1. GDPR perceptions (%)

Source: own elaboration

Based on the results it can be said that the majority of these young people in the sample understand the most important GDPR privacy directives and terms and believe that they comprehend regulatory environment to use confidently the accessible internet sites. Related to the exact meaning of GDPR and how it regulates data processing and use of their personal data, respondents are not so sure anymore. In the case of the proper interpretation of privacy policy, respondents show lower confidence. The majority of respondents would not be so sure if they had to explain these policies to others, which can be interpreted as the exact understanding of the legal environment did not materialize, despite the perceptions they gave about it.

To reveal the connections related to the data protection regulation, correlation coefficients were used. Based on the results significant correlation was found among certain questions (significance level: 1%). Correlation coefficients were among moderately strong (at least .455) and strong (.734), and the connections were significant. This indicates that respondents' perceptions about GDPR are mostly associated with more general questions of data protection when the topic is personal data security and the related legal environment.

It was also asked what kind of user expectations are identified related to the collection and processing of personal data, in connection with data protection regulation. This question was asked knowing that the legal effects of GDPR affected mostly data protection directives and communication practice of for-profit firms since the regulation took effect. The related attitudes and expectations are shown in Table 2.

	Absolutely disagree	Rather disagree	Neutral	Rather agree	Absolutely agree
Companies seeking information online should disclose the way the data are collected.	.8	4,8	9,4	43,1	41,9
Companies seeking information online should disclose the way the data are used.	.2	3,6	4,1	32,5	59,6
A good consumer online privacy policy should have a clear and conspicuous disclosure.	.2	2	7,6	36,5	53,8
It is very important to me that I am aware and knowledgeable about how my personal information will be used.	.8	4.8	17	41.9	35.5
A GDPR compatible privacy policy should have a clear and conspicuous disclosure.	.2	1.7	7.6	38.1	52.5

Table 2. Expectations towards data protection directives (%)

Source: own elaboration

Based on the respondents, there was a visible need of the users to be informed how their personal data is collected and used, and all this should be communicated in their privacy directives and communication with their consumers. Companies should most importantly recognize and communicate the use of data they own. There is an elemental need from the respondents to disclose the privacy directives transparently. This need was not only formulated in the case of general privacy directives, but especially in accordance with privacy directives related to GDPR regulations.

Connections related to data protection were also analysed with correlation coefficients (significance level: 1%). The way how data is collected is strongly correlated with the need that companies should disclose how they use data (.537). The connection was slightly weaker in the case of general (.356) and GDPR-related (.324) data disclosure, and the connection was weak (.145) with the need that users should know how the data is used. The way how data is used is also correlated with the need to transparent and visible data disclosure both in general (.397) and related to GDPR (.331), and it correlated weakly with the conscious use of data (.168). The correlation between general and GDPR-related transparent data disclosure is moderately strong (.489), and their correlation with the deliberation of users' data processing is moderately weak generally (.237) and in the case of GDPR, too (.297). These results show it clearly that questions related to data protection and privacy are connected to each other in many ways, and a synchronized management is needed from companies and regulatory bodies.

Conclusions

In sum, it can be stated that the general data protection regulation (GDPR) may be a significant progress in personal data management from a legal aspect. The centre of gravity of the European-level regulation shifted from the affected people's rights towards the obligations of data management already at the time of legislative planning of GDPR regulation. Furthermore, GDPR itself extends the scope of data protection as well. Although it can be considered to be a European regulation, it can also be applied to every person or organisation which collects data or transmits information about EU citizens. The regulation entered into force on May 25, 2018, and this empirical research focused on the perceptions related to the regulation, because it is assumed that one year must have been enough for citizens to perceive the changing data management environment due to the regulation.

With this empirical research the study sought to highlight that users take into consideration both this legal environment and, generally, all data protection directives during their perception. Therefore, it is reasonable from a legislative point of view that the protection of personal data and generally, privacy should regulate all the affected areas. This can thereby increase users' perceived sense of security, providing an opportunity to have control over personal data and providing affected people with information about their use. The year that has passed since the introduction of GDPR also points out that making people get to know and understand regulations in detail would necessitate further information tasks, in order to citizens make themselves more aware of regulations related to data protection issues.

In the future, it may be an interesting research area to analyse the opportunities given by the GDPR regulation in a practical context, especially via the examination of users' behavioural characteristics. The analysis of the actual activities (e.g. if they apply special data protection settings on social media websites, if they read the privacy policies of service providers, whether they have prohibited the management of their data on certain websites) as the continuation of the present research would provide a more holistic insight into GDPR regulation with great complementary results by revealing the connections among users' perceptions.

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Basic and Secondary Emotions in Country of Origin Effects: When Happiness Backfires

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Abstract:

This paper investigates the influence of basic emotions triggered by country-of-origin (COO) cues and secondary emotions generated by stereotypes on consumer brand attitudes. Using an implicit method based on facial recognition, we show that automatically triggered happiness moderates the effect of admiration on brand attitude. Drawing from the Stereotype Content Model and the Appraisal Tendency Framework, we propose a dual parallel processing to explain the role of these emotions in COO effects, in which they have a distinctive, yet intertwined, impact. Our findings extend international marketing literature by specifying how and why different types of emotions can influence brand attitudes.

Keywords: *country-of-origin, Appraisal-Tendency-Framework, emotions*

1. Introduction

Automatic emotional responses to marketing communication have empirically been proven to play an important role for brands, since the emotional reactions of consumers can drive their behaviour in a predictable manner (Wedel & Pieters, 2014). Understood as “organized psychophysiological reactions to news about on-going relationships with the environment” (Lazarus, 1994 p. 38), emotions can be seen as important predictors of consumer evaluations and behavior, and their influence can indeed be unconscious (Lerner et al., 2015). The rise of new technologies have made the assessment of automatic emotional responses possible on a much larger scale, which has revealed relevant empirical findings, which have yet to be explained by academic research (Wedel & Pieters, 2014). Recent studies applied this type of technologies in Country-of-Origin (COO) research, showing that a COO cue – commonly in the form of a “made in” label - can in fact trigger emotional responses and influence consumer brand evaluations (Gómez-Díaz, 2019). It was also shown how basic emotions and country stereotypes interact having a distinct effect on consumer outcomes. These findings have opened up a new research gap about how these automatic emotional responses to COO cues are related to stereotype-driven emotions. In this way, the aim of this paper is to examine the role of automatically activated basic emotions and secondary emotions generated by country stereotypes once a COO cue is perceived. This investigation will provide relevant insights for managers and theorists alike on the effects of different types of emotions on consumer evaluations, which generates inputs for more accurate marketing communication messages using a COO association.

Relevant literature has revealed that stereotypes are automatically activated in the presence of a COO cue (Herz & Diamantopoulos, 2013; Liu & Johnson, 2005). Stereotypes understood, “a socially shared set of beliefs about traits that are characteristic of members of a social category” (Greenwald and Banaji 1995, p. 14), generate country-related emotions, which act as mediators in the relationship between country stereotypes and consumer brand outcomes (Maher & Carter, 2011; Halkias, et al., 2019). The Stereotype Content Model (SCM; Fiske et al. 2002) is the most used theoretical framework to explain the effects on stereotypes in COO effects. The SCM describes social groups into two dimensions, namely competence (beliefs with regard to the country’s capabilities and efficiency) and warmth (beliefs about how friendly or good-natured a particular country is perceived) (Fiske et al. 2002). Extending the findings of the SCM, the “Behaviours from Intergroup Affect and Stereotypes” (BIAS) framework (Cuddy et al., 2007) proposes that there are four emotions as a result of stereotyping, namely admiration- elicited by upward assimilative social comparisons with both high competence and warmth; pity, generated by downward assimilative comparisons of low competence and high warmth; contempt, elicited by downward contrast comparisons with both low competence and warmth; and envy, generated by upward contrastive comparisons of high competence and low warmth (Cuddy et al., 2007). Empirical evidence showed that these emotions work as mediators of stereotypes and consumer brand outcomes; particularly, admiration and contempt lead to favourable and unfavourable behavioural tendencies respectively (Maher & Carter, 2011), whilst the influence of pity and envy depends on the configuration of the stereotype (Halkias et al., 2019).

Although the BIAS map might explain the influence of emotions triggered by stereotypes, it tells only half of the story. The BIAS map is based on cognitive appraisal theory (Lazarus, 1991), which understands emotions as a result of a conscious cognitive evaluation, specifically a stereotype, in which emotions are assessed through explicit methods based on self-reporting. Previous research has shown that a COO cue can also

trigger basic emotions automatically, which can be assessed via implicit methods such as facial recognition. These results showed that indeed basic emotions influence consumer outcomes whilst moderating the effect of country stereotypes (Gómez-Díaz, 2019). As stereotypes generate secondary emotions, understood as emotions arising from conscious cognitive appraisals (Lazarus, 1994), it is important to consider that the type of emotions a country stereotype generates is different from the one that is automatically activated by the presence of COO cue. Basic emotions work as a tool for immediate action/inaction preserving wellbeing; secondary emotions involve a cognitive process based on an ability to evaluate preferences over outcomes and expectations (Damasio, 1999; Ekman, 1992). Furthermore, the information processing of basic emotions can occur automatically in the absence of conscious deliberation influencing decisions, e.g. automatic immediate preference (Zajonc, 1980), whilst the information processing of secondary emotions depends on the type of evaluation, which in case of in-group and out-group judgment differs considerably and mostly depends on situational and socio-cultural aspects (Leyens et al., 2001).

Drawing from the Appraisal Tendency Framework (ATF; Lerner & Keltner, 2000; Han, et al., 2007), the influence of automatically activated emotions and stereotype-driven emotions can be explained through a dual path of information processing that is simultaneously activated when a COO is perceived and a consumer needs to make a decision. In this dual path, emotional responses in the form of discrete basic emotions can exert an influence, which can also be unconscious and therefore difficult to assess with traditional explicit methods (Han, et al., 2007). Furthermore, each emotion is linked to a specific appraisal tendency - a process directed to a goal from which the emotion starts (Lerner & Keltner, 2000), allowing its influence to some extent be predictable (Lerner, et al., 2015). Following Lerner et al., 2015, the influence of emotions depends on their intensity and appraisal "emotions have motivational properties that depend on both an emotion's intensity and its qualitative character" p. 805.

Drawing from the SCM and the ATF, this study focuses on arguing how different types of emotions are generated after an exposure to a COO cue having distinctive, yet interrelated effects on consumer brand evaluations. The central argument of this paper will show how emotional and cognitive responses to COO cues follow a parallel and dual processing, in which basic and secondary emotions impact brand attitudes differently. These findings are theoretically relevant as they widen our understanding of discrete emotions in COO effects, in particular those automatically activated, which remain neglected. The implications offer relevant insights from a managerial perspective, as they provide a specific perspective on the use of emotional or rational inputs in marketing communications.

2. Theoretical Background and Conceptual Framework

2.1 Emotions Triggered by Country of Origin Cues and Country Stereotypes: A Parallel Processing

The mere exposure to a COO cue simultaneously activates automatic cognitive evaluations in the form of country stereotypes (Herz & Diamantopoulos, 2013) and also automatic emotional responses influencing consumer brand evaluations (Gómez-Díaz, 2019). This automatic activation can be explained as a parallel processing, in which both emotions and cognition have an independent yet interrelated influence on consumer

decisions and behaviour (Lerner et al., 2015). This means that when a person faces a COO cue and makes a decision, there are two paths exerting an influence. On one hand, a cognitive path, in which automatic stereotypical country evaluations are activated and associated to brands in response of the need to make a judgment (Diamantopoulos, et al., 2017; Kolbl, et al., 2019) e.g. choosing a German brand because the product is associated with the positive stereotype of competence commonly attributed to Germany; and on the other hand, an affective path, in which non-controllable emotional responses to events can influence a consumer decision as a response of the need/desire to keep its well being e.g. buying a Swiss chocolate because of the happiness a person can associate the product with (Achar et al., 2016); Although the cognitive path has received higher attention than the affective one in a COO context (Heslop et al., 2004; Zeugner-Roth & Diamantopoulos, 2010), several studies have revealed that the affective path, in which emotions can have a direct influence, can be equally or even more relevant in a consumer decision-making moment (Achar et al., 2016; Lerner et al., 2015).

2.2. The Interaction Between Basic Emotions Triggered by COO Cues and Secondary Emotions Generated by Country Stereotypes

Although basic and secondary emotions are different, they might interact as a result of sharing core appraisals and action tendencies. The core appraisal relates to the core meaning associated with an emotion (e.g. experiencing loss associated with sadness) (Lazarus, 1991) and action tendencies with expressive or instrumental behavior linked to an emotion (Frijda, 1987). For instance, happiness, a basic emotion associated with a pleasant joyful state coming from pleasurable sensory information within a hedonic dimension, is associated with heuristic thinking and active behaviour (Ekman & Rosenberg 2005). Indeed, happy people are more likely to produce simplistic response strategies relying more on stereotypes (Bodenhausen, et al., 1994; Onu, et al., 2016). Moreover, admiration results from a positive evaluation of both warmth and competence leading to favourable attitudinal and behavioural tendencies (Cuddy et al., 2007). Thus, it is to be expected that happiness will moderate the effect of admiration on brand attitude.

A moderating effect can also be expected of anger - negative unpleasant state of annoyance and displeasure -with contempt, as anger can be considered as an approach-oriented emotion inducing heuristic processing (Berkowitz, 2012). Indeed, COO studies have shown that anger influences product evaluation as participants rely on COO related thoughts in anger vs. sad condition (Maherswaran & Chen, 2006). In a similar manner, disgust - revulsion to something considered distasteful or unpleasant- can be expected to moderate the effect of envy, as disgust is considered as a high-certainty emotion, increasing heuristic processing (Tiedens & Linton, 2001). However, the moderating effects of anger and fear are to be expected in specific contexts, such as consumer animosity in which these negative emotions are commonly triggered (Harmeling, et al., 2015). Furthermore, as sadness - loss and misfortune of an undesirable outcome – shares the core appraisal of pity, and thus might moderate its effect.

The discussion above sets the conceptual framework of our research (see Figure 1). We argue that both emotional responses- in the form of basic emotions, and country stereotypes are automatically triggered by COO cues influencing brand attitude in a dual-

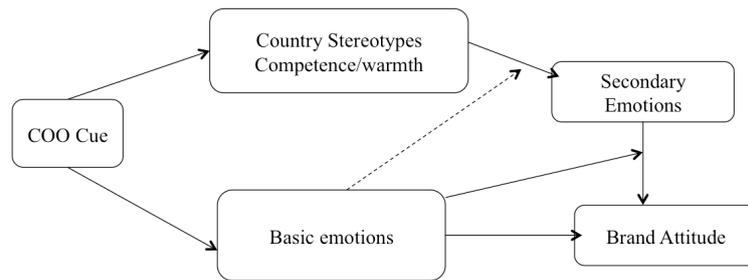


Fig. 1 Conceptual model for COO effects on basic emotions and country stereotypes mediated by country-related emotions

processing path. We further hypothesize a moderating effect of basic emotions on the effect of secondary emotions on brand attitude, which would depend on the appraisal and action tendencies as well as on the intensity of each emotion. As shown by previous literature (Gómez-Díaz, 2019), a moderating effect of basic emotions on the link between stereotypes and secondary emotions is also to be expected. Specifically, we hypothesize happiness to moderate the effect of admiration on brand attitude. Considering the specific context of the present research, in which any negative country-induced feeling of anger, sadness and disgust are controlled, we are not expecting moderating results of these emotions as they must be empirically manipulated. Based on previous empirical findings (Maher & Carter, 2011; Halkias, et al., 2019), we specifically expect that admiration and contempt will mediate the effect of country stereotypes on brand attitude.

3. Empirical Study

3.1 Research design

Three hundred and eleven Austrian consumers (52% Male $M_{age} = 41.24$, $SD = 16.67$) were recruited for a web-based experiment in a between-subjects, conducted by a professional marketing research agency. Three different conditions were tested (Made in the Netherlands, Made in Spain and control group- with no country) in two different product categories chocolate and headphones controlling for hedonic and utilitarian factors using fictitious brands. Netherlands and Spain were selected as stimulus they were expected to have opposite dimensions in stereotype dimensions (higher warm in Spain and higher competence in Netherlands) based on pretests. Basic emotions were implicitly assessed through the facial recognition software Crowdemotion, which captures micro-facial expressions recorded using a webcam (Crowdemotion, 2019). It interprets emotional responses according to the following classification of basic emotions: surprise, anger, sadness, disgust, fear and happiness (Ekman & Rosenberg, 2005). The system uses LGBP-TOP, a dynamic appearance descriptor for automatic facial expression recognition, measuring the certainty of presence of emotions on a scale from 0 to 1 (Grewe, et al., 2007; Almaev & Valstar, 2013). The values should be < 0.3 to consider a certainty of presence of emotions (Witchel et al., 2018). Participants watched a thirty seconds video ad, in which a COO cue was introduced on the second twelfth. We assessed country stereotypes by asking respondents to indicate their beliefs about how most people perceive the specific country according to dimensions of warmth (friendly, good-natured, kind, warm) and competence (capable, efficient, intelligent, competent) consistent with previous studies (Cuddy et al., 2007; Fiske et al., 2002; Maher & Carter, 2011). Participants provided ratings on seven-point scales for brand attitude (with measurement scale by Steenkamp et al., 2003). Product

involvement was used as control variable. All scales employed had high reliability (all α s > .93).

4. Analysis and Results

We assessed emotional responses by examining the levels of emotions when respondents perceived a COO cue. Six intervals were created using the first timestamps - a specific value generated at the time when a facial expression is detected -equivalent to 30 seconds. The intervals were created with the highest values of each interval. In the first two intervals there was no COO exposure while in the third interval the COO cue was introduced and thus, selected as the value for hypotheses testing. Significant differences were detected in the headphones category for anger (Non exposure M = 0.78 SD= 0.20; Exposure M = 0.76; SD= 0.15 t (118) = 2.13, p <0.01); and surprise (Non exposure M = 0.78 SD= 0.79; Exposure M = 0.73; t (119) = 2.56, p <0.05). In the chocolate category groups were significantly different for sadness (Non exposure M = 0.81 SD= 0.15; Exposure M = 0.75 SD = .14; t (119) = 3.49, p = 0.000) fear (Non exposure M = 0.80 SD= 0.12; Exposure M = 0.84; t (119) = -1.85, p <0.05). The stereotype levels showed higher competence in the group of Netherlands (Competence Netherlands M = 4.90 SD= 1.27; Spain M = 4.37; t (219) = 3.047, p <0.001) and higher warmth in the group of Spain with no significant differences (Warmth Spain M = 5.17 SD= 1.10; Netherlands M = 4.98; t (221) = -1.152, p = .251).

The moderated mediating relationships specified in Figure 1 were tested using the model 15 PROCESS macro v3.0 (bootstrapping with 5000 resamples), showing significant results for the moderation of happiness on the indirect effect of competence on brand attitude (Modmed index = -.283, 95% BCI: -.4680, -.009). The interactions terms ($\beta_{\text{COMP}\times\text{HAP}} = .450$, p = .025) and ($\beta_{\text{ADM}\times\text{HAP}} = -.624$, p = .004) were both significant indicating that the direct effects of competence on admiration and admiration on brand attitude were moderated by happiness. However, the direction of the interaction was opposite, the former positive and the later negative. As Figure 2 shows, at high levels of happiness, a higher degree of competence leads to high brand attitude, whilst at high levels of happiness, the levels of brand attitude remains relatively constant despite the levels of admiration, as Figure 3 illustrates.

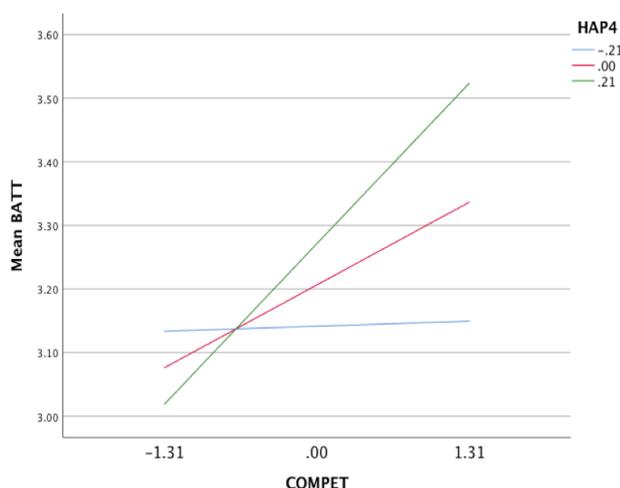


Figure 2. Moderating Effect of Happiness on Competence - BATT

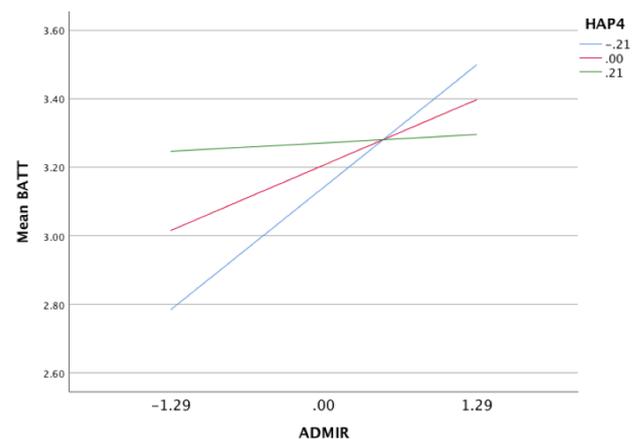


Figure 3. Moderating Effect of Happiness on Admiration- BATT

Although the moderation of happiness on the indirect effect of warmth on brand attitude was not significant (Modmed index = $(-.140, 95\% \text{ BCI}.3540, -.0301)$), the interaction terms ($\beta_{\text{ADM} \times \text{HAP}} = .382, p = .053$) and ($\beta_{\text{WARM} \times \text{HAP}} = -.208, p = .000$) showed significant results in a similar way than with competence. As Figure 4 illustrates, at high levels of happiness, a higher degree of warmth leads to high brand attitude. Moreover, as Figure 5 illustrates, at low levels of happiness, a higher degree of admiration leads to higher brand attitude.

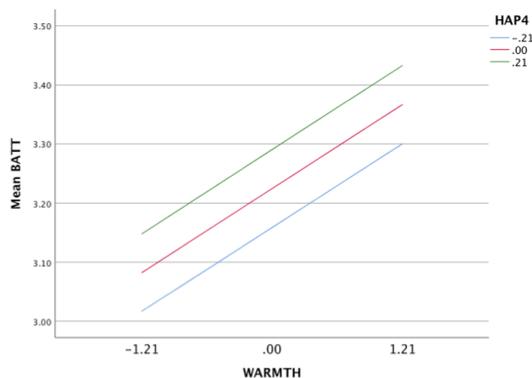


Figure 4. Moderating Effect of Happiness on Warmth- BATT

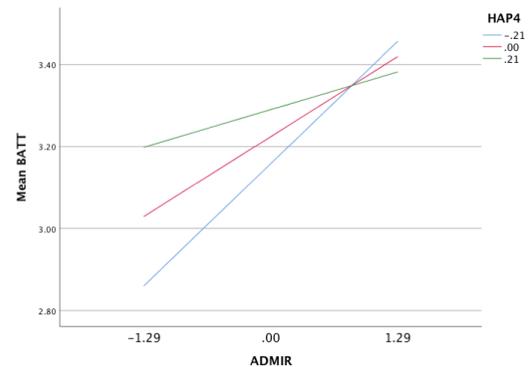


Figure 5. Moderating Effect of Happiness on Admiration- BATT

5. Discussion and Implications

This study integrates COO research with social psychology (SCM and BIAS map) and cognitive psychology theories (ATF) to investigate the role of basic emotions and secondary emotions in COO effects. We propose a conceptual framework based on a dual parallel processing, in which basic emotions and country stereotypes are automatically triggered by COO cues influencing brand attitude directly and through secondary emotions respectively. By applying an implicit method to assess facial expressions of emotions, our findings revealed that happiness moderates the mediation of admiration in the relationship between stereotype dimensions and brand attitude. Interestingly, the direction of the moderating effect was opposite, with stereotypes was positive and with admiration was negative.

These are important findings not only because they provide evidence of the dual parallel processing, but also because they show that the effects of basic and secondary emotions are indeed different. Happiness has shown to play an important role in stereotyping as people might rely more on heuristic thinking when they feel happy (Bodenhausen, et al., 1994). However, as our findings showed, the influence of happiness depends on its intensity since at low levels, admiration plays a more important role. This also means at high levels of happiness, the effect of admiration will decrease reducing the effect of the stereotype. This is particularly important with regards to the use of COO cues for marketing communication strategies as too high happiness might backfire reducing the intended effect of the stereotype-driven association. These findings also have an important theoretical

implications for COO research with regards to specifying the conditions under which country stereotypes have a different effect as pointed out by previous literature (Maher & Carter, 2011).

Understanding the distinction between the cognitive and affective components of country image is crucial when researchers want to draw conclusions about COO effects. We found that it is important to consider not only the distinction between the two components, via a dual processing path, but also that the two processes are interrelated. Far from being antagonistic paths, emotional and cognitive processes are deeply intertwined. A feeling can change a thought and a thought can change a feeling. Our findings suggest that the influence of basic emotions triggered by COO cues and secondary emotions triggered by country stereotypes will depend on the type of emotion as well as on its levels of intensity.

Our findings support the importance of examining discrete emotions and their effects on cognitive processes and decision making. Using a discrete approach to examine emotions enables theorists and managers to understand the specific appraisal and action tendencies associated with each emotion and identify possible predictable outcomes (Keltner & Horberg, 2015). Neglected by the big majority of previous COO studies, basic emotions might add important insights for managers as well as explanatory power for theories. In our study, automatically activated happiness, an action-tendency emotion, moderated the effect of stereotypes and secondary emotions in different ways. It might also be that other action-tendency emotions, such as anger or fear, might have a similar effect. The role of affect in stereotyping have focused mainly on negative emotions (Bodenhausen, et al., 1994), however, positive emotions might have an even stronger influence that can change a negative effect. Therefore, managers should consider an analysis of the situational context in order to predict a possible of influence of basic emotions. Moreover, happiness can have an important effect on consumer evaluations, but when it is not connected to the brand or it is too highly aroused, it might not have the desired effect as it can backfire and the communication efforts could be in vain. It is important to consider that basic emotions work as a tool for action to respond to specific threats and opportunities in the environment (Han, et al., 2007). Within a COO context, this means that basic emotions can work as a tool for managers to leverage their marketing stimuli by fueling the effect of a positive stereotype, but also they can be seen as a threat in the way that they can reduce the effect that stereotypes trigger, like it is the case with admiration.

Our study also has several limitations with regards to the empirical setting that can be considered for future studies. First, different countries with alternative configuration of warmth and competence should be considered in order to control for high/low levels, which will reveal more specific aspects of the interaction between the affective and the cognitive path. Second, further research should investigate different outcome measures that are more related to consumer behaviour in order to identify the extent to which the interaction between basic and secondary emotions influences actual behavioural outcomes. Finally, it would be relevant to investigate negative emotions controlling for contextual characteristics such as consumer animosity. This would provide relevant inputs with regards to emotions associated with action tendencies, such as anger and fear, as these emotions have shown an important role in influencing the impact of stereotyping as much as happiness.

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Opt-in or Opt-out? – Effects of Choice Architecture on Chatbot usage and Consumer Attitudes within the E-commerce

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Abstract:

Firms are rapidly investing into chatbots to reach higher productivity in sales and service. As first examples exerted positive effects compared to website offers, firms might try to guide customers to this chatbot interaction. Applying “choice architecture”, firms could design an opt-out or opt-in strategy, reflecting presumed consent or actively requested consent. This study investigates differential effects of this strategy on consumer’s choice and attitude towards the firm. Furthermore, the moderating effect of customer ratings is analyzed. Our study demonstrates the multilayered effects of choice architecture, showing the relevance of considering a well-suited chatbot interface design for firm’s success.

Keywords: *chatbots, choice architecture, digital interaction*

1 Introduction

For both practice and research, one of the promising technologies for customer service interaction are digital conversational agents, i.e. software that is designed to communicate in natural language (Gnewuch, Morana, Adam, and Maedche, 2018). In the business context, in particular chatbots have become increasingly popular recently (Følstad and Brandtzæg, 2017; Araujo, 2018). A chatbot is defined as a “text-based agent designed to carry on a conversation” (Schuetzler, 2019, p. 253) and is mainly communicating via messaging applications such as Facebook messenger, or integrated on websites (Følstad and Brandtzæg, 2017). Advancements in natural language processing and the trend of text messaging as dominant interaction form for many consumers are both fueling the setup of these chatbots in manifold settings, including marketing, sales or customer service (Gnewuch *et al.*, 2018; Følstad and Brandtzæg, 2017; Araujo, 2018). As firms begin to realize this potential, they are rapidly investing to incorporate chatbots in customer service and e-commerce sales structures. In 2018, over 300.000 chatbots were registered on Facebook messenger alone - and they are expected to become an integral part of customer-firm interactions in the near future (Nealon, 2018). Chatbots are used to automate processes, aid customers, increase customer experiences and solve requests or complaints instantly (Følstad and Brandtzæg, 2017). Practical examples from different branches showed that when consumers interact with chatbots, compared to interaction with firm websites, both the satisfaction level and the intention to buy or use a company service were positively affected (Liffreing, 2018; Klein *et al.*, 2019). For example, the car producer Kia reported that their chatbot “Kian” raised the conversion rates towards test drive bookings strongly from 6% to 24% (Liffreing, 2018).

To exploit these potentials, firms might actively stimulate chatbot usage on their websites or mobile interfaces to migrate their customers into chatbot interaction. Thus, customers have to make their choice between a website interaction and a chatbot interaction. If a firm favors one particular option, in our case the chatbot use, they could employ different strategies to lead people to their desired option (Krijnen, Tannenbaum and Fox, 2017). The strategic design of presenting different options, often also labeled as “choice architecture”, could have a high impact on customers choices but also on their attitudes towards the “architect” as creator of the structures (Thaler, Sunstein and Balz, 2010).

In practice, two common forms of chatbot interaction promotion could be observed – either formulated as a request to enter the chatbot conversation (also labeled as “opt-in” strategy) or as presumed consent to a chatbot interaction as a starting point of the conversation (labeled as “opt-out strategy”). To give consumers the freedom of choice, however, the option to leave the chatbot interaction is given in both cases.

So far, research has not addressed effects in the design of the transition from the e-commerce website to a customer-firm chatbot interaction. Related chatbot literature focused mainly on drivers of chatbot adoption, the design of chatbot features (e.g., more human-like features) or interaction effects (e.g., satisfaction) (Schuetzler, Grimes, and Giboney, 2019; Araujo, 2018; Gnewuch *et al.*, 2018). Using a lab experiment, we show that different types of chatbot migration strategies affect customers’ perceptions and usage behavior.

Our research offers several contributions to marketing literature and management. First, it demonstrates that firms have to be aware of different impacts depending on their choice architecture when designing the chatbot interface. Being the first to analyze both attitudinal and behavioral effects of migration strategy in this context, extends literature by showing that not only the chatbot quality and design itself is relevant for success. Rather, also how to lead a customer from using a website to interacting with a chatbot needs to be considered carefully, as it is influencing customer perceptions and behavioral outcomes. For management, this

study offers a guideline in chatbot interface design depending on the business and customer relationship targets. Second, we add consumer attitudes as further perspective in the Opt-in/-out literature. Goswami and Urminsky (2016) noted already, that most current research focused solely on the effect of different choice architecture on the choice itself, neglecting influences on the choice makers' attitudes towards the policy maker. As asymmetric effect, consumers might consent to an offer, e.g., to a chatbot use due to the more intrusive or pushy opt-out strategy. At the same time, however, exactly this feeling of being pushed might be, at least sub-consciously, perceived and will affect their attitude towards the firm negatively. Our study includes the consumers' attitude perceptions towards the firm as policy maker, which might create undesired effects on downstream targets such as purchase, customer relationship or loyalty.

2 Conceptual Framework

2.1 Choice architecture

As reaction to a firm's offer of a chatbot, customers have to make the decision whether to engage in the offered chatbot interaction or not. In a more abstract sense, this is their first choice regarding the customer-chatbot interaction process. As firms create the chatbot and decide about the design and integration within their website, they could decide between many different ways to present the choice options to their customers. Many studies showed, that different forms of presenting choice options could have a strong effect on the decision of the targeted person (Krijnen *et al.*, 2017; Young, Monin, and Owens, 2009; Goswami and Urminsky, 2016). In their book "Nudge", Thaler and Sunstein (2009) coined the term "Choice architecture" to describe these strategic designs of favored options attempting to influence decisions of a target without eliminating their freedom of choice. It is important to note, that a "neutral" architecture is not possible, as any kind of presentation form is influencing the decision somehow. Thus, choice architecture is pervasive, unavoidable and could be done in many ways, by e.g., changing order attributes, setting defaults or by varying the number or ranking of choices (Thaler and Sunstein, 2009; Krijnen *et al.*, 2017; Johnson *et al.*, 2012).

Among these different possibilities to design options, in particular the nomination of a favored option as default was identified as one of the most powerful methods (Krijnen *et al.*, 2017). Positive effects of default setting on choice was shown in various fields such as economics, public policy, psychology, medicine or ethics, among others. Most related research determined that a default strategy takes advantage of consumer inertia, laziness, processing limitations or their strivings for effort reduction (Madrian and Shea, 2000; Young *et al.*, 2009; Brown and Krishna, 2004; Johnson, Bellman, and Lohse, 2002). Usually, defaults are presented in a rather implicit way (vs. explicitly mentioning them); e.g., via automatic enrollments or presumed consent (Krijnen *et al.*, 2017).

If consumers have to decide between consenting or refusing an offer, two distinct strategies could be distinguished: opt-in and opt-out. The opt-in strategy requests an explicit consent for the desired option, whereas the opt-out strategy presumes a consent from the decision makers, i.e., that they would choose this option unless voting for another option. Switching from an opt-in to an opt-out strategy revealed in several contexts a strong shift of consumer choices. For example, in some countries the citizens are presumed to consent to organ donation unless they register actively to not donate (opt-out case), whereas in others they have to register actively to be a donor. The opt-out strategy strongly increased donation rates across countries (Johnson and Goldstein, 2003). Likewise, if consumers are automatically enrolled in periodic payment plans, they are more likely to save for their retirement (Madrian and Shea, 2000). Most related studies analyzed situations where an inactive state (i.e. not making a decision) is

leading automatically to the selected default option (Johnson and Goldstein, 2003; Brown and Krishna, 2004).

However, in many situations in service or sales, this automatic process is not suitable, as consumers could not be compelled to act - e.g., to purchase items. Thus, following Goswami and Urminsky (2016), the decision to engage in a chatbot conversation is a choice-option default and requires active endorsement. This means, firms could not create a situation where consumers automatically are in a dyadic interaction (e.g., texting with the chatbot), but they could create a "presumed consent" by designing an already started conversation. In practical terms, they could start asking consumers a first question (opt-out strategy) instead of requesting consent for chatting first (opt-in strategy). This means, firms could alter choices by varying the presumed choice consent status of consumers.

2.2 Moderating effect of trust cues

When individuals are confronted with such an influenced choice option, they might perceive the default option as implicit endorsement and are, in turn, trying to interpret the possible intentions of the "choice architect" – i.e. the firm as creator of the options (Thaler and Sunstein, 2009). In general, consumers might have two distinct motives readily apparent: they presume that firms design choices either to help customers (i.e., customer oriented attribution) or to help themselves (i.e., egoistic, self-oriented attribution) (Thaler *et al.*, 2010). Obviously, the subjective interpretation result is strongly influencing consumers' attitude towards the firm and their subsequent behaviors. An inference of firm's egoistic motives is leading, in general, to negative impacts in both dimensions (DeCarlo, 2005; Thaler *et al.*, 2010).

To reach a more reliable evaluation, consumers search for any cues or hints that might guide their decision, such as signals, related experiences or personal heuristics (Brown and Krishna, 2004). The drawn inferences depend highly on the availability of these cues, such as former contact with a service provider, recommendations, ratings, brand image, or alike. Primarily, these cues should signal the trustworthiness or credibility of the sender (Mackiewicz, 2010). In turn, consumers take these signals then as basis for their beliefs about the sender's intentions behind the choice architecture (Krijnen *et al.*, 2017; Brown and Krishna, 2004). If consumers conclude that a firm is primarily designing the choice driven by egoistic motives, they are less willing to consent to the offer and their attitude towards the firm is turned negatively (Krijnen *et al.*, 2017). Within the e-commerce context, a common form of trust cues are customer ratings. In many cases, they are shown as a 5-star rating reflecting others' experiences. Since social ties or face-to-face contacts are missing in an online business, recipients have only limited abilities to assess the firm, and the evaluation of others should offer a useful cue for trusting beliefs (Mackiewicz, 2010).

3 Hypotheses

Regarding the differential effects of both Opt-in vs. Opt-out strategies on consumer choices, a clear trend could be identified. In most of the cases analyzed and across contexts, the presumed consumer consent in the Opt-out default setting increases the real consent of consumers – be it a product purchase, contract approval, or organ donation (e.g., (Johnson and Goldstein, 2003; Thaler and Sunstein, 2009). Thus, we hypothesize:

H1: Implementing an opt-out strategy will result in higher usage compared to the opt-in strategy.

In several studies comparing both choice strategies, the opt-out version offered higher levels of the desired choice, but is at the same time perceived to be more intrusive and could even lead to strong backlashes (Krijnen *et al.*, 2017). In contrast, and congruent with our pre-study

(focus group), the opt-in strategy is mainly perceived as gentle and polite invitation from the policy maker (Goswami and Urminsky, 2016). Therefore, we formulate:

H2: An opt-out (vs. opt-in) strategy will result in less positive attitude towards the firm.

Customers rely on available trust cues, as they try to evaluate the trustworthiness and in turn, the most likely firm intent behind the choice design. Foremost, consumers want to sort out whether a firm acts customer-oriented or self-oriented (i.e., egoistic), in order to react accordingly to the choice (DeCarlo, 2005). Ratings of other customers could serve as available trust cues, and are moderating if consumers are attributing egoistic or customer-oriented motives to the firm (see. Fig. 1). As observed in other studies, obviously low (high) ratings will result in negative (positive) inferences about the trustworthiness of the firm, and in turn, increasing attributions of egoistic (customer oriented) motives (Packard, Gershoff, and Wooten., 2016). Thus, we propose:

H3: Low trust cues will activate consumer's attributions of firm's egoistic motives.

H4: High trust cues will activate consumer's attributions of firm's customer-oriented motives.

Depending on the inferences activated in the consumers mind, they express different attitudes and behaviors. If consumers attribute egoistic motives behind the choice strategy, they expect that the firm will put their own interests before the customer interests, and might even try to deceive the customer. To cope with that, consumers should be more reluctant to use the endorsed chatbot (DeCarlo, 2005; Packard *et al.*, 2016). Furthermore, the concerns about possible negative impacts, such as manipulations, will affect consumers' attitudes negatively. We conclude:

H5: Higher levels of consumer's attributions of firm's egoistic motives will lead to (a) lower chatbot usage and (b) lower attitudes towards the firm.

In contrast, if consumers infer that firms designed the choice to help, these assumed good intentions lead into another mindset. In this case, the "absence of motivational concerns" (Packard *et al.*, 2016) and assumed supportive motive is leading to more positive attitudes and higher chatbot usage. We propose:

H6: Higher levels of consumer's attributions of firm's customer-oriented motives will lead to (a) higher chatbot usage and (b) higher attitudes towards the firm.

Based on the conceptual frame and hypotheses, we built our research model (Figure 1):

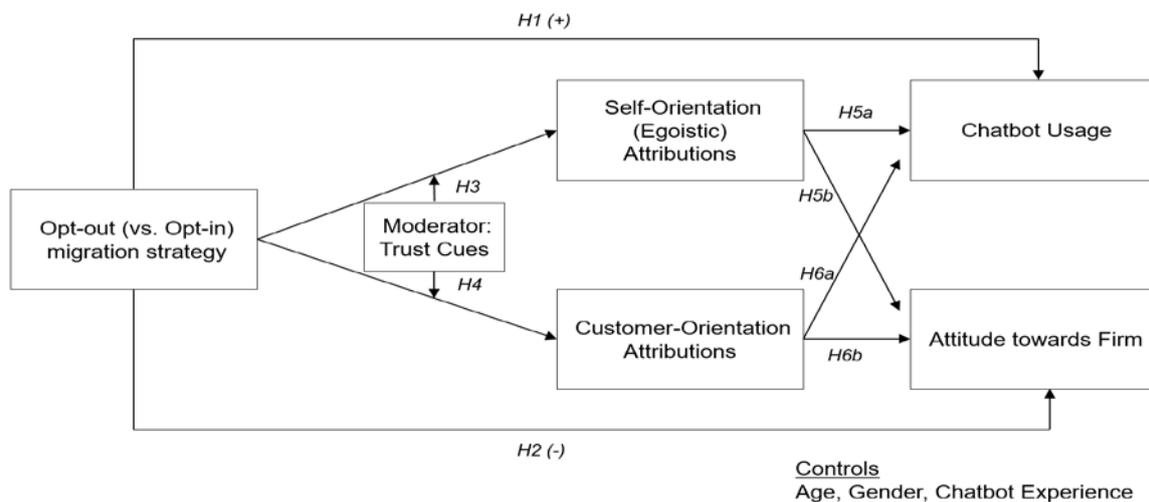


Figure 1: Research Model

4 Method

To analyze the influence of different choice settings (Opt-in vs. Opt-out) on consumers' chatbot usage and their attitudes towards the firm, we conducted an online experiment in an e-commerce context. We chose the insurance industry as study context, because in particular the finance and insurance service firms are searching for solutions to reduce their service costs while preserving to deliver a high level of customer service. Several big firms within the industry started to implement chatbots (e.g., Allianz, Axa) (Bergfeld, 2017) and are using both opt-in or opt-out as starting interface; thus offering a highly realistic case.

We conducted a qualitative pre-study (focus group) to analyze the choice of suitable trust cues as well as the realism level of the cases, including the opt-in vs. opt-out choices. The focus group confirmed that the developed cases reflect the theoretical study framework.

Second, to test the proposed relationships, we conducted a pilot study with a limited set of respondents ($n=68$), with an average age of 31 and a share of 60 % woman. We set up a web-based experimental scenario study with a 2 (Opt-in vs. Opt-out framing) \times 3 (High credibility cue vs. Low credibility cues vs. No cues) design. We recruited students and university staff from a major German university. Participants were randomly assigned to one of the six scenarios, and were asked to imagine that they are interested in buying an insurance for their car, and have opened a website of an insurance company. On this website, a framed box (window) offered an interaction with a chatbot, either with a request to interact (opt-in version) or with a first question (opt-out version), presuming a consent to interact.

Subsequently, participants actively choose their desired activity, by mouse click on text buttons, either consenting to chatbot interaction, refusing it or choosing a button from the main menu. Hereby, a click on the chatbot interaction button is reflecting chatbot use as real behavioral variable. After presenting the manipulation, we will ask participants to rate their beliefs regarding underlying firm intentions.

We used existing reflective multi-item measures for all latent variables from the extant literature and adapted them to the study context. Scales for "Inferences of firm's self-serving (i.e., egoistic) motives" were used from Habel, Schons, Alavi, and Wieseke (2016) and a "Customer orientation attributions" scale from Alavi, Wieseke and Guba (2016). "Consumers attitude towards the firm" was adapted from Packard and Berger (2017).

In order to keep the real target of the survey as disguised as possible, we conducted the research without a concise manipulation check. However, to integrate a verification of the manipulation to a maximum possible extent, we integrated two questions. First, we asked respondents if they feel that the chatbot "had already been started". Second, they could rate if they "could decide, whether to start (or not) the chatbot at all". Both questions were rated on a 7pt Likert scale.

Finally, participants rated the case realism level with two items from Wagner *et al.* (2009) and reported their prior experience with chatbots, insurances and online shopping, as well as their gender and age.

The confirmatory factor analysis results provided strong evidence of the reliability and validity of the used measures. Psychometric properties were all well above the recommended levels. In particular, the respective Cronbach Alpha's ranked between $\alpha: ,76$ for the Customer Orientation scale and $\alpha: ,921$ for the "Attitude towards the Firm" scale.

5 Results

We used IBM SPSS 25 to assess the proposed relationships. The realism of our online scenario was acknowledged. The respondents rated the described scenario as realistic ($M_{\text{Composite score}}=5.25$, $SD=1.31$), significantly above the scale midpoint ($p < .001$).

Related to the manipulation check questions, respondents from the two scenarios (Opt-in vs. Opt-out) rated their perceptions whether the chatbot interaction has already started or not. Hereby, the different scenarios created different perceptions. As expected, participants in the Opt-Out scenario ($M_{\text{Opt-Out}} = 5.15$, $SD = 2.21$) (vs. Opt-In, $M_{\text{Opt-In}} = 4.15$, $SD = 2.22$) agreed more to the statement, that the chatbot has already started to interact with them – with a marginally significant difference ($p < 0.1$). Furthermore, the Opt-out participants expressed a higher perceived restriction of their free will to choose whether to interact with the chatbot (or not) ($M_{\text{Opt-Out}} = 3.00$, $SD = 2.13$ vs. $M_{\text{Opt-In}} = 5.07$, $SD = 2.22$), $t(66) = -3.83$, $p < .001$.

Regarding the main effects, Hypothesis 1 relates to the chatbot use as real consumer behavior. A Chi-square test of independence was performed to examine the relation between Opt-In vs. Opt-out design and the use behavior. The relation between the variables was significant, $X^2(1, N = 68) = 6.50$, $p = .0011$. Thus, respondents in the Opt-out groups ($M_{\text{Opt-Out}} = .52$, $SD = .51$), compared to the Opt-in groups ($M_{\text{Opt-In}} = .22$, $SD = .42$), chose significantly more to interact with the chatbot. That means, that over 50% of the Opt-out group members chose the chatbot to interact with, while only 22% of the Opt-in group members chose alike.

Related to the ratings of consumer attitudes towards the firm, as stated in Hypothesis 2, no significant differences between the Opt-out ($M_{\text{Opt-Out}} = 3.97$, $SD = 1.34$) and Opt-in ($M_{\text{Opt-In}} = 4.20$, $SD = 1.17$) groups could be found, $t(66) = -.48$, $p = .63$). If we compare the scenarios without any star rating, we have despite a very low sample size, an almost marginal significant effect, with $t(66) = -1.60$, $p = .12$).

Next, we analyzed the effects of customer ratings on consumers inferences of firm's motives. We could not find significant effects of either low or high customer ratings on customer inferences, be it egoistic motives or customer oriented motives ($p > .10$).

To test the influence of "egoistic" or "customer oriented" inferences of firm motives on the dependent variables, we applied linear regressions. In particular, the inference egoistic motives had no influence on chatbot use ($p > .10$). However, consumers who inferred these egoistic motives rated their attitude towards the firm significantly more negative, $F(1,67) = 17.43$, $p < .001$, $R^2 = .20$). A similar picture is revealed regarding the customer orientation inference. We did not find a significant influence of the "customer orientation" inference on chatbot use ($p > .10$), but we find a positive influence of this inference on attitudes towards the firm $F(1,67) = 12.17$, $p < .005$, $R^2 = .14$).

Regarding the control variables, we could not find any influence of gender, age, chatbot experience, insurance experience or online shopping experience on chatbot use or attitude towards the firm.

6 Discussion

Following the notions of Thaler and Sunstein's in their book "Nudge", the design of choices could influence consumer choices considerably (Thaler and Sunstein, 2009). This study analyzed, how website visitors could be lead to a chatbot interaction by strategically designing the starting interface.

In particular, we went deeper into the effects of creating a status of an expected consent and, in comparison, an active request whether to join the chatbot interaction. Therefore, we contribute to the growing literature of choice architecture (e.g., Brown and Krishna, 2004; Johnson *et al.*, 2012; Goswami and Urminsky, 2016; Krijnen *et al.*, 2017) by adding digital

interaction as new research field, analyzing the effects of an invitation to use a chatbot, and the effects, when a non-action is not leading to the Opt-out case.

Furthermore, this research adds to the streams of chatbot interaction literature as quite new and upcoming field (e.g., Følstad and Brandtzæg, 2017; Gnewuch *et al.*, 2018; Araujo, 2018), following the strongly increasing relevance for businesses. As firms invest heavily into this field as new communication and service form to satisfy customer needs and save personnel costs at the same time, many questions regarding the effective integration into existing channels and communication tools, such as their existing websites, remain unsolved.

Our research indicates the following main findings on choice architecture effects in chatbot interaction interfaces:

Related to chatbot use as ultimate target of deliberate choice architecture, we found, that Opt-out version is significantly increasing the use rate (vs. Opt-in). Looking at the percentages of use, that the use rate was lifted by 30 percent points, from 22% to 52%. Thus, introducing the chatbot invitation with a question and overtly showing that the consent is presumed, is indeed leading to higher use rates. Members of the Opt-out scenario were aware of this attempt, as they indicated a significantly higher feeling that the chatbot had already started. So, it seems, that they follow the path because the interaction has already begun.

Nonetheless, to create longer lasting business results in today's competitive environments, a long-term customer relationship is highly relevant besides the one-time interaction effects. As one of the first studies in the choice architecture field, we therefore added the effect on customer attitudes towards the chatbot integrating firm as further dependent variable.

Related to this, as stated in Hypothesis 2, we expected the Opt-in design to be more gentle and to create a more positive attitude versus the more intrusive Opt-out version. Yet, in our pilot study, we found no difference of the Opt-in vs. Opt-out groups on their attitude towards the firm as chatbot-implementing counterpart. Though, due to the low sample size and sufficient mean differences (delta: -.23), we expect significant differences in the large-scale study. The non-significance is also interesting, as consumers in the Opt-out group perceived a restricted freedom in choice, as described above. Nonetheless, this perception seems not to lead to threaten the perception of the consumer towards the firm as creator of the chatbot and responsible choice architect – at least for the pilot sample.

Regarding the moderating effect of trust cues, we were surprised about the non-significant effects. Maybe, trust ratings are not considered as valuable cue for such an interaction because people do not fear a loss as in a product purchase or alike. Furthermore, customers might not be able to link the star rating with the categories of egoism or customer orientation, but rather with a feeling of chatbot functionality or not. Other relevant factors should be discovered by further studies.

Managerial implications

Our research offers several implications for firms aiming to integrate a chatbot interaction for customer service and sales.

First, the results suggest to use the Opt-out choice design to lead website visitors to the chatbot interaction. The pilot study exerted no negative effects on the attitude towards the firm. However, a large scale study might reveal, according to Hypothesis2, that attitude is affected negatively. If this is the case, firms have to decide, whether to choose short-term gains and lead users more intrusively with the Opt-out version, or prevent positive user attitudes while accepting lower chatbot usage rates with employing the Opt-in version. Based on the current data, we conclude that while consumers feel more restricted in their freedom to choose the interaction or not in this Opt-out design scenario, this generally

negative feeling seems not to hurt the use rate or attitude negatively. Furthermore, the introduction of a star rating system seems not to be effective in these cases.

Limitations and future research

As with all research, this study comes with some limitations. Our current status of the study is still nascent, as we just started with a pilot study and limited number of respondents. As mentioned, we will set up a large-scale study to extend the data and reap more robust results. Related to the structure, our experiment used a single case of car insurance as one particular context. Further research with other settings and surroundings, for example with a product-related context would extend the generalizability of the findings. Next, a field study, with an integration into real firm websites, would help to increase the external validity. In particular, it would be interesting to see, how the firm image and perceived innovativeness, trust and their product types would influence the effects of consumer behavior and attitudes towards both the chatbot and the firm itself.

Furthermore, this study focused on a initial chatbot interaction – as consumers did not know the website, the firm and the chatbot interaction to exclude possible confounding effects. However, in real life, consumers are in a continuous exchange with firms. That means, their re-use intention of a chatbot and their loyalty attitudes after a chatbot interaction would be relevant for the firm to be considered as well. And, the business related results of chatbot interaction versus non-chatbot interaction, such as sales, type of items chosen and possibilities of cross-selling are important factors for future chatbot interaction research.

Moreover, our Opt-out scenario was still formulated in a polite way to be as close as possible to the Opt-In scenario, and to avoid confounds. Further research might analyze, if an Opt-out case with a stronger push feeling might create reactant feelings and affect the outcomes negatively.

There seems to be a promising development of chatbots. Currently, the experience with chatbots seems to be quite low, in our experiment it was rated below the mid-point ($M=3.47$, $SD=1.78$). The question is, if customers get more accustomed to use a chatbot, if this would serve for a more confident choice, and in turn, if this would affect the Opt-in vs. Opt-out design effects. We hope scholars will take these first findings, and continue to support both theory and practice with insights regarding chatbot design for long-term success.

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So close, yet so far? A methodological investigation of the potential of and optimal sample sizes for the application of napping as rapid sensory method in marketing contexts

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Abstract:

This paper introduces a large-scale Napping study, serving the purpose of identifying the optimal sample size for a scientific employment of Napping in marketing contexts. A napping with 15 yogurt samples ($n = 104$) for the properties appearance, taste and texture was arranged. For the evaluation of the napping data, random samples were evaluated using MFA and GPA. Tucker's congruence coefficient (rc) was used to interpret the results. In contrast to current standards recommending sample sizes of 9-15 respondents, our results suggest Napping sample sizes of at least 20, ideally 33 untrained subjects in order to get statistically sound results.

Keywords: *napping, MFA, sensory marketing*

1 Introduction of paper

Sensory profiling, serving the purpose of defining and quantifying sensory characteristics on which products differ, has been an established and essential tool for food scientists and food manufacturers for a long time. The numerous applications of traditional descriptive profiling techniques include classical “sensory” tasks, such as product development, product improvement and quality control (Valentin, Chollet, Lelièvre, and Abdi, 2012), however, also expand to the fields of marketing and consumer science, involving advertising claim substantiation (Lawless & Heymann, 2010) and the understanding of consumer preferences (Greenhof & MacFie, 1994).

Though being referred to as “one of the most powerful, sophisticated and most extensively used tools in sensory science” (Varela & Ares, 2012), sensory profiling, as conducted with trained assessor panels, is time-consuming and cost-intensive. Consequently, despite of the relevance of traditional profiling, several alternative methods have evolved in recent years, following industrial demand for faster and more cost-effective methods. The resulting rapid sensory methods may – as novel methods for product characterization – not only be regarded as efficient alternatives to traditional methods in sensory science, but expand their range of application to new fields of use (Delarue, Lawlor, and Rogeaux, 2014): Particularly the suitability of these rapid sensory methods for sensory product characterization with consumers (rather than trained assessors) substantiates their noteworthy relevance for the field of marketing, even inducing researchers to refer to these novel methods as the “blurred line between sensory and consumer science” (Varela & Ares, 2012).

While three categories of rapid sensory methods may be distinguished, namely verbal-based methods (flash profile and check-all-that-apply), reference-based methods (polarised sensory positioning and pivot profile) and similarity-based methods (free sorting task and projective mapping aka Napping) (Valentin et al. 2012), the paper at hand exclusively focuses on the latter.

Napping, also being referred to as a holistic approach in sensory analysis (Pagès, Cadoret, and Lê, 2010), represents a similarity-based, rapid descriptive sensory method with a wide range of potential applications in marketing and consumer research contexts.

However, while numerous studies focus on applications of Napping in different contexts, methodological issues, such as the optimal sample size for the usage of Napping in consumer research, have yet not been subject to a thorough discussion, neither in sensory, nor marketing literature. While, according to some standards, samples for Napping should comprise nine to 15 untrained or trained persons who, on average, sample twelve stimuli at a time (Schneider-Häder & Derndorfer, 2016), several other publications report rather vague recommendations, such as that “the appropriate sample size will probably depend on the objectives of the study” (Delarue et al., 2014).

A review of extant studies on Napping ($n = 74$) reveals that, surprisingly, within the field of sensory science, most authors refrain from challenging the recommendation of nine to 15 persons, wherefore only slight discrepancies regarding the authors’ conceptions of appropriate sample sizes can be observed. While several studies consider 15 panellists as optimal for projective mapping methods including napping (see, for instance, Lelievre-Desmas, Valentin, and Chollet, 2017; Louw et al., 2015), there are some downward (e.g. Liu, Grónbeck, Di Monaco, Giacalone, and Bredie (2016), whose sample comprises eight participants) as well as slight upward deviations (Kemp, Pickering, Willwerth, and Inglis, 2018).

To summarize, it can be noted that there is a lack of systematical methodological investigations and statistically validated reference points, wherefore it remains unclear how large a Napping panel should be in order to provide statistically sound and reproducible results. Resting upon these considerations, the paper at hand aims at identifying the optimal sample size for a scientific employment of Napping in marketing contexts.

2 Theoretical background on napping as methodology

Seen historically, the idea underlying Napping may be traced back to projective tests in clinical psychology. Projective tests, such as the also in marketing contexts well-known Rorschach inkblot test, enabled subjects to “indirectly reveal their personalities [...] by projecting themselves through their responses to the stimuli” (Lê, Le, & Cadoret, 2015).

In sensory science literature, the idea of “the idea of asking subjects to reveal themselves through the way they are positioning stimuli (products) on a sheet of paper based on their perceived similarities” (Lê et al. 2015) arose in 1994, encouraged by a publication of Risvik, McEwan, Colwill, Rogers, and Lyon (1994), who come to the conclusion that this approach “...could be a potentially useful technique for linking sensory analysis and consumer research data” (Risvik et al. 1994).

Indeed, despite of initial warnings of sensory scientists, emphasizing that “...as with any untrained panel, beyond the overall acceptance judgment there is no assurance that the responses are reliable or valid” (Stone & Sidel, 1993) or that “...consumers can only tell you what they like or dislike” (Lawless & Heymann, 1999), recent studies provide empirical evidence for the fact that the use of consumers seems to be a good alternative to classical sensory profiling techniques provided by a trained panel (Worch, Lê, & Punter, 2010).

Napping represents a rapid sensory descriptive method, more precisely, a similarity measurement, in sensory sciences, pursuing the goal of obtaining a sensory comparison of several products in terms of their relative similarity to one another. By providing valuable information about products and their sensory properties, as well as consumers’ preferences, Napping facilitates comparisons of products with competing products and may provide valuable insights for product development (Schneider-Häder & Derndorfer, 2016).

According to literature, three sub-categories of Napping may be distinguished: In general napping, all samples are served at the same time and arranged by the participants on a sheet of paper, usually with the dimensions 400 x 600 mm, relative to each other. The paper thereby represents a two-dimensional space. If the samples differ, they are placed far away from each other, whereas if they are similar, they are positioned close to each other. Each product can be assigned a position in the coordinate system and be characterized by freely selectable sensory attributes (Derndorfer, 2016).

In the so-called partial napping, samples are analyzed focusing on individual product features, such as appearance, smell, taste or texture (Pfeiffer & Gilbert, 2008)

Sorted Napping extends the positioning of the products by grouping arranged samples with similar sensory properties into product groups. Subsequently, these clusters are described verbally with defined attributes. As a result, in addition to the positioning data of the individual samples, statements about the respective clusters are obtained. Similarities and differences between the individual products can be determined (Kerमारrec, 2010).

3 Empirical work

3.1 Study design

We conduct a large-scale Napping study with $n = 104$ participants, hence drastically deviating upwards from current standards, recommending that samples for Napping should comprise nine to 15 persons (Schneider-Häder & Derndorfer, 2016). The rationale for the large sample size is that, after completion of the Napping procedure and coding of the data, several random samples systematically varying in size may be drawn out of this sample. This procedure (i.e., the drawing of random samples out of a large-scale sample) allows a systematical analysis of sets of variables collected on the same observations with Multiple Factor Analysis (MFA) and a subsequent Generalized Procrustes Analysis (GPA), providing an index of consensus (Tucker's congruence coefficient) between the different random samples and the whole sample. Building on these analyses, recommendations pertaining to the optimal sample size for Napping studies may be derived.

For sensory testing, a combination of partial and sorted napping was used, pursuing the aim of not only obtaining the positioning data of the individual samples, but also statements about the respective formed sample clusters. This procedure should allow the drawing of conclusions about the similarities or differences between the different samples and a description of them. The sensory testing was carried out in the sensory laboratory of a Central European University.

3.2 Selection of product category and stimuli

As stimuli, 15 different commercially available strawberry yoghurt samples were selected. Each of the yogurts was provided in transparent plastic cups (filling quantity: 20 g), which were served at room temperature. All samples were purchased in the morning of the day of testing and stored at room temperature until sensory testing. In addition, the samples were coded with four-digit, randomly selected sample numbers.

3.3 Procedure

104 voluntary and untrained students of the University participated in the sensory testing. In advance to their participation, respondents were familiarized with the method of Napping.

During sensory testing, each of the 104 subjects was provided with all 15 samples simultaneously. In addition to the samples, each participant received three sheets of white paper in DIN A3. Respondents were instructed to systematically cluster the samples based on perceived similarities and differences in a way that similar samples were arranged close to each other. In a next step, the positions of each sample were marked on the paper. Moreover, respondents were requested to verbally describe each cluster with sensory attributes, whereby they used their own vocabulary. Overall, three rounds of Napping were performed, as participants were asked to first rate samples based on their appearance, followed by taste and texture.

The marked positions of all samples as indicated by the test persons were transferred into a coordinate system, whereby the lower edge of each sheet of paper formed the x-axis and the left side edge the y-axis. As this coding procedure has to be performed manually, this is a quite time-consuming procedure. Based on the thus evolving coordinate system, all sample positions were recorded in form of coordinates and entered into a table in Microsoft Office Excel for each participant and for all three characteristics (appearance, taste, texture).

The verbal descriptions (sensory attributes) were also collected in the Excel file, regardless of the assessors, for each sample and all three characteristics in order to assess the frequencies of the responses. Very similar attributes (e.g. thick, viscous) were combined into one. Subsequently, these data were analyzed with the help of XLStat® using multiple factor analysis (MFA) and Generalized Procrustes Analysis (GPA).

3.4 Analysis

Due to poor data quality, four respondents had to be excluded from the analysis, resulting in an analyzable sample of $n = 100$. In a next step, for the evaluation of the napping data, random samples for all of the three characteristics (appearance, taste, texture) were drawn from the entire sample in order to determine the optimal sample size. The samples taken comprised 10, 15, 20, 33 and 50 cohorts and were evaluated using multiple factor analysis (MFA) in the Microsoft Excel add-on XLStat®. Table 1 provides an overview of the sizes and numbers of samples drawn.

sample size	n = 10	n = 15	n = 20	n = 33	n = 50
number of samples drawn	10	6	5	3	2

1: Characteristics of random samples

Subsequently, the two-dimensional coordinates for each of the 15 stimuli resulting of the various MFAs were subject to Generalized Procrustes Analyses (GPA), following the purpose of analyzing metric multidimensional scaling between each sub-sample and the whole sample by means of scaling, rotation and translation techniques. Tucker's congruence coefficient (r_c) serves as an index of consensus between the different random samples and the whole sample.

3.5 Results

Procrustes analyses of the sub-samples with $n = 10$ and $n = 15$ respondents reveal Tucker's congruence coefficient (r_c) values below 85 %, thus indicating that, in fact, Napping sample sizes below 15 are not recommendable, as they provide only limitedly reliable results. Methodological literature even suggests that congruence coefficients below 0.85 should not be "interpreted as indicative of any factor similarity at all" (Lorenzo-Seva & ten Berge, 2006).

The most important results of the characteristic property texture, which achieved the comparatively lowest consensus indices in the Generalized Procrustes Analyses (GPA), are shown below.

Figure 1 shows the result of the MFA on the characteristic property texture.

The characteristic texture was used as an example, because it is the most demanding and therefore the most difficult to discriminate attribute for untrained probands. The MFA clearly shows overall that the test subjects classify the products based on the two factors of consistency and homogeneity.

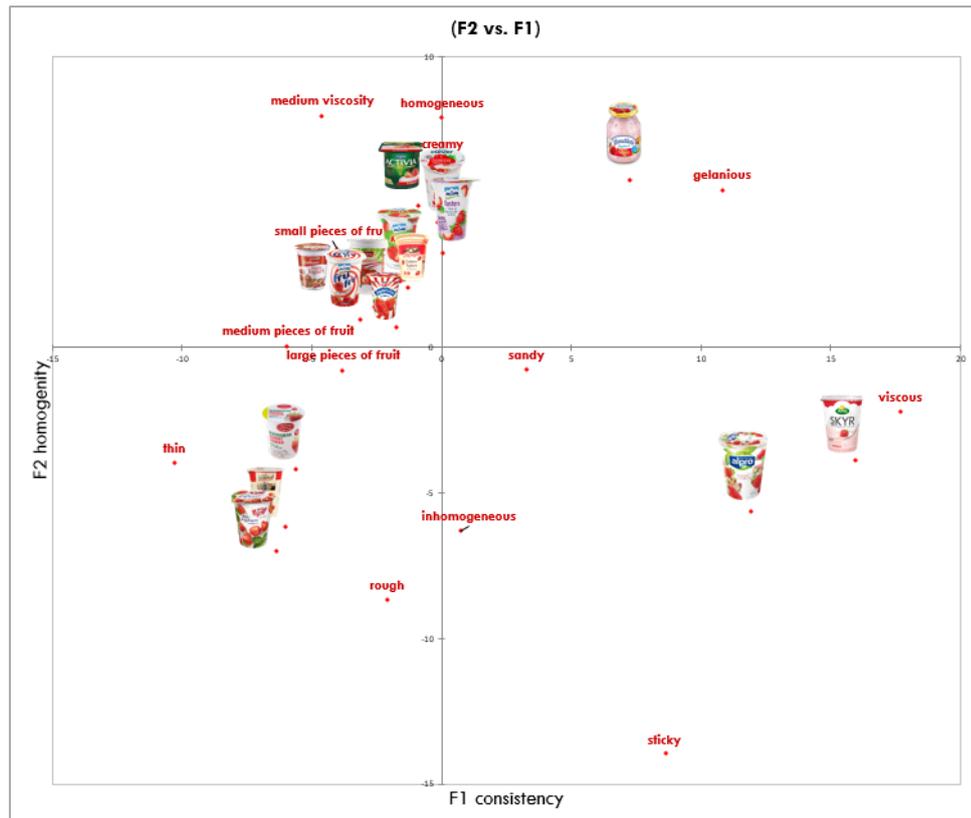


Figure 1: Results multiple factor analysis, texture, n = 100

Figures 2 and 3 illustrate the results of Procrustes Analyses for the characteristic property texture for the sub-samples of the sample size n = 20 and n = 33 with the lowest consensus indices of all drawn sample comparisons of all three characteristic properties. Table 2 and 3 show Tucker's congruence coefficients (rc) for all sub-samples of the sample size n = 20 und n= 30 in comparison.

Figure 2 visualizes the sub-sample with the lowest consensus index of all sample sizes n = 20 of the characteristic property texture. As the Tucker's congruence coefficient (rc) illustrates, the consensus indices for this sample size are between 0.90 % and 0.95 %. This indicates an appropriate similarity of the individual subsamples to the entire sample (Lorenzo-Seva & ten Berge, 2006).

Table 2 shows Tucker's congruence coefficients (rc) for all sub-samples of the sample size n = 20 in comparison.

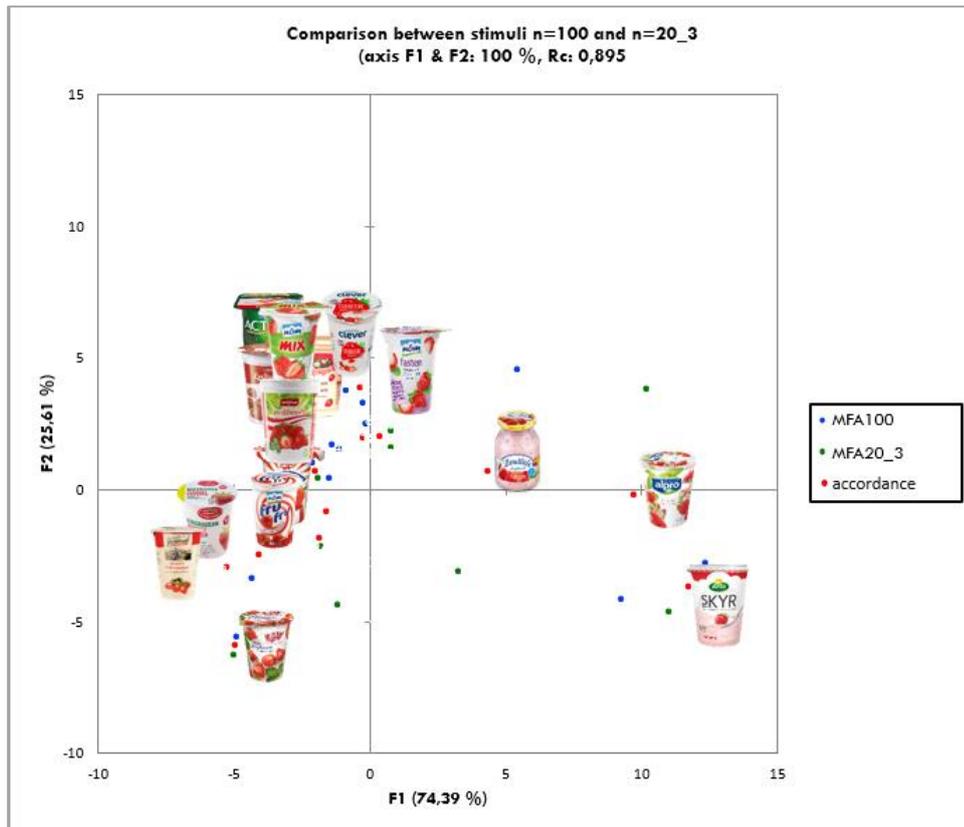


Figure 2: Comparison between whole sample and sub-sample, texture, n =20_3

sub-sample	GPA20_1	GPA20_2	GPA20_3	GPA20_4	GPA20_5
Rc	0,925	0,937	0,895	0,934	0,954

Table 2: Tucker's congruence coefficient for sub-samples, texture, n = 20, texture

Figure 3 shows the sub-sample n = 33_3, the sample taken (n = 33), which describes the lowest consensus index of all samples of all characteristics.

Table 3 shows Tucker's congruence coefficients (rc) for all sub-samples of the sample size n = 30 in comparison.

As can be seen from the Tucker congruence coefficients (rc), all consensus indices for sample sizes of n = 33 are equal to or higher than 97 %, which indicates an extraordinarily high consensus of the individual sub-samples with the entire sample. According to literature, congruence coefficient values over 95 % can be regarded as almost identical factors (Lorenzo-Seva & ten Berge, 2006).

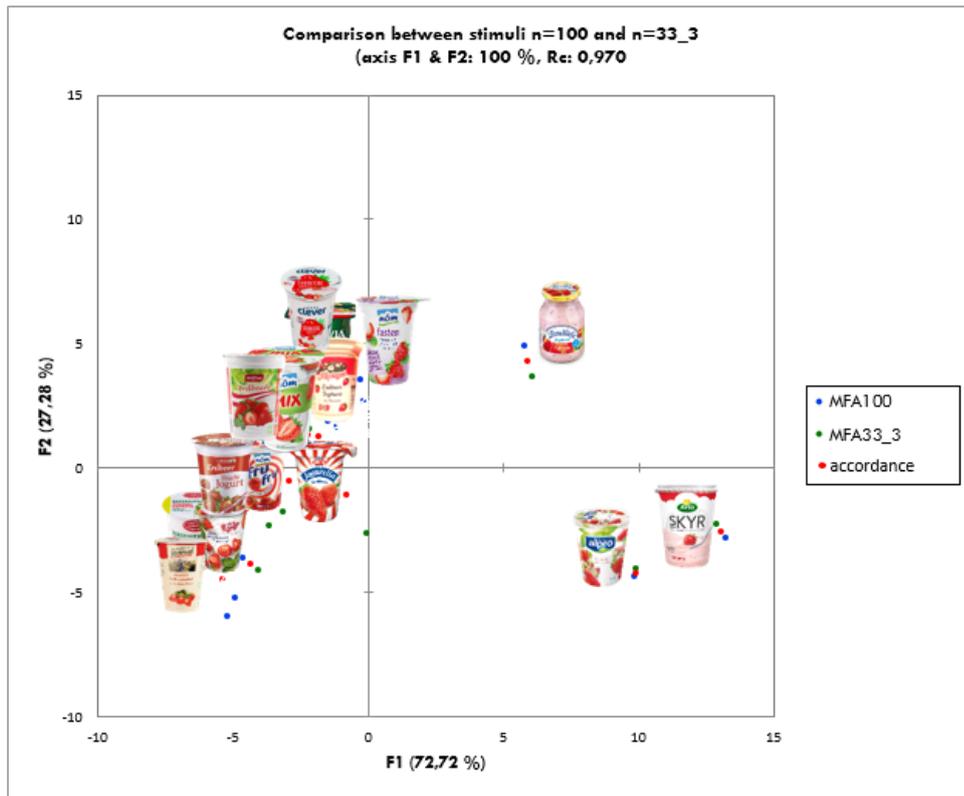


Figure 3: Comparison between whole sample and sub-sample, texture, n =33_3

sub-sample	GPA33_1	GPA33_2	GPA33_3
Rc	0,986	0,980	0,970

Table 3: Tucker's congruence coefficient for sub-samples, texture, n = 33

To complete our results, Table 4 shows the results of the characteristic properties taste and appearance based on the worst result of the Tucker's congruence coefficient.

sample size	n = 10	n = 15	n = 20	n = 33	n = 50
number of samples drawn	10	6	5	3	2
taste Rc_{min}	0,718	0,795	0,832	0,930	0,975
appearance Rc_{min}	0,877	0,974	0,959	0,987	0,993

Table 4: Tucker's congruence coefficient for sub-samples, taste and appearance (Rc minimum)

4 Conclusion

Being based on our analyses, current recommendations for Napping sample sizes (nine to 15 respondents) deliver, at best, average results, with all of our sub-samples ($n \leq 15$) exhibiting not even fair similarity to the whole sample.

In conclusion, we consider Napping a promising method for the application not only in sensory science, but also in marketing contexts. However, we advise researchers to build their Napping studies, at least those with untrained respondents (consumers), on at least 20, ideally over 33 respondents in order to get reliable and statistically sound results.

5 General discussions, implications and further research

The concept of the study was primarily intended as a decision-making aid for SMEs in order to achieve valid results with the smallest possible number of subjects. However, the methodological strength of the napping method is that it offers the opportunity to combine quantitative mapping results with qualitative, subjective, freely selectable descriptions of the subjects. This study should serve as a food for thought so that this method can also be tested in other marketing-relevant areas apart from sensory marketing.

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Buying a ton of bricks online: opportunities and challenges of digitalizing complex marketing channels

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Abstract:

Marketing scholars have been calling for more conceptualizing research to account for the complexity of today's marketing channels. Despite a wealth of research on digital marketing channels, gaps remain concerning the digitalization of complex marketing channels, involving business-to-business and business-to-consumer interactions. In this multiple-case study of six building material manufacturers, I induct a theoretical framework of three archetypes with different opportunities and challenges in their digitalization efforts. I integrate definitions from two fields of literature, marketing channel, and information systems research, and contribute to existing literature with a nuanced view of firms' considerations in fragmented and interdependent marketing channels.

Keywords: *marketing channels, digitalization, case research*

1. Introduction

In February 2019, electric vehicle maker Tesla announced to close the vast majority of its stores and shift every purchase to their online shop. With this shift, Tesla disrupted the decade-old channel structure in the automotive industry, where car shoppers traditionally go to local car dealers for product information, test drives, and price negotiations. Tesla identified two opportunities streamlining its marketing channels: reducing costs and improving customer reach (Tesla, 2019). In general, researchers define marketing channels as systems of interdependent parties: manufacturers, intermediaries, and end-users (Palmatier, Stern, & El-Ansary, 2016). When firms plan to digitalize their marketing channels, i.e., leveraging digital technologies for specific processes or activities (Kannan & Li, 2017), they consider multiple opportunities and challenges. The example of Tesla illustrates three aspects: first, manufacturers expect numerous opportunities from digitalizing their marketing channels, e.g., saving costs and reaching new customers. Second, to digitalize a marketing channel, firms need to overcome considerable challenges, e.g., invoking a change in consumer behavior. Third, digitalizing marketing channels has immediate consequences for involved channel partners, e.g., closing down resellers.

Insightful research exists to explain the opportunities and challenges of digital marketing channels for manufacturers. Identified opportunities stem from lowering transaction costs, reaching new consumer segments, improving understanding of customer behavior, and offering a wider selection of products via digital channels (e.g., Brynjolfsson, Hu, & Smith, 2003; Chiang, Chhajed, & Hess, 2003; Gielens & Steenkamp, 2019). Challenges often relate to internal and external channel conflict, i.e., with downstream channel intermediaries (e.g., Tsay & Agrawal, 2010; Webb, 2002; Webb & Lambe, 2007). Research on digital marketing, however, is fragmented (Yadav & Pavlou, 2014). Therefore, it is difficult to find a comprehensive definition of digital marketing channels, encompassing all channel activities, for example, sales and advertising, transportation, and financing. Gaps also remain regarding firms' considerations when digitalizing marketing channels in today's complex and interdependent marketing channels (Krafft, Goetz, Mantrala, Sotgiu, & Tillmanns, 2015; Rosenbloom, 2007). Firms, which digitalize their marketing channels, have to consider their interdependent, downstream channel partners. To examine networks and conceptualize firms' considerations, marketing channel researchers encourage qualitative research (Krafft et al., 2015).

A common and recommended approach to conceptualize is theory building from cases (Eisenhardt & Graebner, 2007; Yin, 2014). Therefore, I conduct a theory-building, multiple case study following the "Eisenhardt method," comparing multiple cases and interview data from diverse informants (Langley & Abdallah, 2011). Focal firms in my study are manufacturers of building materials in Germany, producing material for construction and refurbishment, such as roofing tiles, wallboards, drywalls, isolation materials, bricks, scaffolding, and heating systems. Marketing channels for building materials in Germany are highly complex and lagging in digitalization. Leveraging field and archival data, I analyze a sample of six building manufacturers in this study. The data includes interviews with key decision-makers of focal firms, annual reports, and in-depth expert interviews.

Based on my analysis, I induct a framework of opportunities and challenges for firms when digitalizing marketing channels and cluster firms in three archetypes. The underlying logic utilizes the interaction framework proposed by Yadav & Pavlou (2014), which differentiates interaction by involved channel members, e. g. firm-firm or firm-consumer interactions. Common opportunities for all three archetypes first and foremost include saving costs through improved process efficiency between manufacturers and distributors, but also benefitting from standardization efforts by channel partners and providing information to existing customers. There are, however, firms that identify additional opportunities and subsequently have different intentions for the digitalization of their marketing channels. Some firms establish additional

digital touchpoints to diversify their marketing channel, while others disintermediate channel members to redefine the marketing channel. I deepen challenges identified by Neslin et al. (2006), which, in the context of this study, arise due to product and industry characteristics across all archetypes, with some firms finding ways to work around these challenges.

My research makes two contributions to existing research. First, I develop an interdisciplinary definition of digital marketing channels by incorporating concepts from information systems research and marketing channel research. Second, I apply this definition to provide an understanding of firms' considerations when digitalizing marketing channels in distinctly complex and interdependent channels. Thereby, I respond to marketing scholars calling for more qualitative, conceptualizing research to shed light on the complexity of many of today's marketing channels. In addition to these contributions, practitioners benefit from my insights, which can improve their understanding of different strategies and underlying intents in marketing channels increasingly disrupted by digital technologies.

2. Research Background

2.1. Interdisciplinary definition of digital marketing channels

According to marketing channel research, there are three main parties in a marketing channel: manufacturers of products and services, intermediaries, and end-users. Marketing channels are the pathway for products from production to consumption, and their objective, consequently, is to make a product or service available to an end-user (Palmatier et al., 2016). Scholars define a marketing channel as a system of interdependent parties involved in achieving this objective (Kozlenkova, Hult, Lund, Mena, & Kecec, 2015). Different marketing channel activities are necessary to achieve this objective. The underlying activities and processes are manifold, including logistics, such as transportation and storage; sales, advertising and information sharing with end-users; ordering and payment; financing, negotiation, and risk as well as relationship building (Krafft et al., 2015; Palmatier et al., 2016). As soon as digital technologies facilitate or enable activities and processes among and between members of a marketing channel, researchers refer to it as a digital marketing channel (Kannan & Li, 2017). Although research on digital marketing channels is abundant, their definition remains broad and vague, especially in complex business-to-business channels involving multiple stakeholders.

Information systems research, therefore, helps to inform the definition of digital marketing channels for the context of this study. Information systems research provides a clear definition for a subset of marketing channel activities, namely ordering, payment, and information sharing in a business-to-business environment. These activities are "digital" when technologies connect organizations to exchange information or conduct related transactions. Scholars in information systems research often use two groups of terms interchangeably to describe these technologies: business-to-business electronic commerce and other similar phrases as well as inter-organizational information systems (Sila, 2015; Teo, Wei, & Benbasat, 2003). These terms can include any open or closed, digital connection between two organizations, such as electronic data integration, enterprise resource planning systems, electronic hubs, online platforms, online shops, or webshops.

Identifying a definition for the remaining activities which encompass digital marketing channels is difficult because the literature on digital marketing overall is abundant but fragmented (Yadav & Pavlou, 2014). The nature of relevant activities determines the level of possible digitalization (Webb, 2002). On the one hand, activities involving human interaction, such as negotiation and relationship building, are hard to be conducted digitally but can be simplified with digital tools. Similarly, activities involving the physical exchange of goods and materials, such as logistics, transportation, and storage, cannot be conducted digitally but have the potential to be facilitated by digital means (Webb, 2002). On the other hand, some activities

are ubiquitous in the digital environment, for example, lead generation through online advertising, sales through online shops, and complimentary services such as financing.

The applied definition of digital marketing channels for this study, therefore, is two-fold. First, it follows the classification by Yadav & Pavlou (2014) and perceives marketing channel activities as interactions between channel stakeholders. Second, it builds upon the suggestion by Trenz (2015), who posits that the dichotomy of online vs. offline does not adequately reflect today's channel realities. Therefore, I define a digital marketing channel as a channel that leverages digital technologies to establish, facilitate, and enhance channel activities between members of a marketing channel.

2.2. *Opportunities and challenges of digitalizing marketing channels*

Marketing scholars agree that for manufacturers, digital marketing channels, and digital disintermediation create "unprecedented opportunities" (Gielens & Steenkamp, 2019: 368). There are numerous opportunities in digital channels. Their underlying benefit often stems from lower transaction costs (Watson, Worm, Palmatier, & Ganesan, 2015). By avoiding double marginalization and inefficient pricing, direct, digital channels enable lower transaction costs and higher profitability (Chiang et al., 2003; Webb, 2002). Direct, digital channels allow manufacturers to interact with end-users directly and to reach new customer and market segments (Gielens & Steenkamp, 2019; Webb, 2002). When determining which channel functions to perform internally and how to cooperate with channel partners, direct, digital channels can provide greater proximity, reduced dependency, and more control over marketing channels for manufacturers (Watson et al., 2015). Besides, firms can create valuable, rare, and hard-to-imitate resources through access to customer data via direct and online channels (Watson et al., 2015). Digital channels facilitate the selling of more complex and customized products and enable better customer service (Hsu, Kraemer, & Dunkle, 2006; Son & Benbasat, 2007).

Additional opportunities also arise for the entire channel and other channel members, i.e., intermediaries and end-users. Wider arrays of products become visible and available (Brynjolfsson et al., 2003). The internet provides more information about products and prices, thereby reducing search costs (Agatz, Fleischmann, & van Nunen, 2008). Prior research also suggests that even distributors can benefit from direct channels by manufacturers, through lower wholesale prices by manufacturers and labour division, which mitigates double marginalization and thus improves efficiency (Arya, Mittendorf, & Sappington, 2007; Li, Gilbert, & Lai, 2014; Tsay & Agrawal, 2010). Many marketing scholars find that positive relationships improve performance for all related parties in the long run, when upstream or downstream members of a channel are not perceived as potential competitors but primarily as partners (Watson et al., 2015). Establishing e-business technologies between firms fosters partnership success, raising financial performance, effectiveness, and efficiency (Spralls, Hunt, & Wilcox, 2011). Finally, Yan & Pei (2015) find that cooperative advertising between manufacturers and distributors can also improve channel performance as a whole.

In contrast to these opportunities, there are also challenges of digital marketing channels for manufacturers as well as entire channels. Many marketing scholars identify channel conflict as the most serious challenge, which can occur within a marketing channel but also within a firm (Agatz et al., 2008; Webb, 2002). Within a firm, buyers could move their purchases from offline to online channels (Agatz et al., 2008). Within a channel, manufacturers could harm long-standing relationships through digital disintermediation, i.e., removing intermediaries from the channel (Webb, 2002). Direct channels by manufacturers may cannibalize distributors' sales (Chiang et al., 2003).

Manufacturers may face further challenges. There are, of course, technological challenges, such as the lack of IT infrastructure, skills, and expertise (Iacovou, Benbasat, & Dexter, 1995). When adding a digital channel and hence selling through multiple channels, it can be difficult to coordinate channel strategies, allocate resources, and integrate data to understand customers'

behavior (Neslin et al., 2006). Additionally, digital channels can cause internal multi-channel conflict in manufacturing firms concerning the alignment of goals, communication, and coordination (Webb & Lambe, 2007). Moreover, managing digital channels presents a trade-off between process integration and separation. Contrary to traditional channels, online channels frequently encompass additional related services, e.g., delivery to a specific location or at a specific time. These services can become crucial components for manufacturers to provide (Agatz et al., 2008). Due to their immediate impact on delivery capacities, fluctuations in demand tend to have a stronger impact on digital channels and logistics, therefore, need to be more flexible (Agatz et al., 2008). Lastly, new, pure online players may establish digital channels. This could not only increase competition but also pose a threat to a manufacturer's brand and reputation (Gielens & Steenkamp, 2019).

Complexity in marketing channels overall continues to grow. Many scholars acknowledge that marketing channel systems are mostly not dyadic or even triadic relationships. Rather, they are interdependent networks of multiple parties, focusing on long-term success (Watson et al., 2015). These networks are often characterized by multiple, interdependent stakeholders, governed by normative and social structures (Watson et al., 2015). Conceptualizing research can account for this complexity. Marketing scholars call for more methodological diversity and comprehensive, interdisciplinary research designs to reflect the complexity of many of today's marketing channels (Kozlenkova et al., 2015; Krafft et al., 2015). To examine complex channel networks and to develop concepts and hypothesis frameworks, marketing channel researchers encourage qualitative research (Krafft et al., 2015). Therefore, this study explores the following research question in a theory-building, multiple-case study: what are the opportunities and challenges of digitalizing complex marketing channels?

3. Methodology

3.1. Data collection and analysis in theory-building, multiple-case study research

To understand the opportunities and challenges of digitalizing marketing channels, I conduct a theory-building multiple-case study. Case study research is a suitable method to investigate this phenomenon and its context, the marketing channel (Yin, 2014). Moreover, a theory-building case study enables combining the two research strands, which – in isolation – do not offer a comprehensive answer to my research question (Eisenhardt & Graebner, 2007). In my multiple-case study research, I investigate six cases, analyzing four types of data sources: (1) the primary data source were multiple semi-structured interviews with decision-makers in relevant positions of focal firms, followed by (2) informal and focused follow-up questions where necessary. I complemented these data sources with (3) annual reports for further within- and cross-case analysis and conducted (4) over 20 additional interviews with industry experts, investors and decision-makers at professional distributors and applicators to get a solid understanding of the industry's marketing channel. The data analysis process consisted of three key steps: within-case analysis for each case, followed by cross-case comparison and comparison with extant literature. Applied pattern matching and triangulation of multiple data sources during analysis, as well as a case study database and protocol, ensured internal and construct validity as well as reliability of my results (Yin, 2014).

3.2. Industry setting of the cases

The phenomenon that sparked my initial interest is the sluggish implementation of digital solutions in the construction sector overall and in the German building material industry in particular. Many different business functions and stakeholder interactions in this industry have not yet been digitalized (McKinsey Global Institute, 2017). The setting of the building material industry in Germany is appropriate and informative to study my research question for two reasons: first, in the industry in Germany, there is a huge number of interdependent channel members, so I can adequately investigate my research question in a very complex marketing channel network. Second, unlike many other industries, businesses in the construction sector in general and building materials industry, in particular, have failed to successfully implement digital marketing channels or carry out considerable portions of their sales via these channels (Statista, 2018). Therefore, both opportunities and challenges are on top of the management agenda.

4. Findings

4.1. Three archetypes with different considerations when digitalizing marketing channels

Due to space limitations, I omit the within-case analysis and focus on cross-case analysis in this shortened version of the paper. The within-case analysis yields opportunities and challenges encountered by focal firms when digitalizing marketing channels. Cross-case comparison of focal firms provides distinct patterns of similarities and differences in these opportunities and challenges. Based on these distinct patterns, I induct a framework of three archetypes. These archetypes are summarized in **Table 1**. Archetypes share a set of common opportunities but differ by additional opportunities, by their subsequent intent of digitalizing marketing channels and by the challenges they encounter in doing so.

Firms like Archetype I aim to maintain the current marketing channel with all involved stakeholders and only digitalize selected processes and activities, for example, by offering an online ordering platform. They leverage digital marketing channels primarily to increase their efficiency. Firms like Archetype II aim to diversify their marketing channel to be prepared for potential future disruptions like new entrants. They also identify efficiency potentials, but additionally, they establish touchpoints with downstream channel partners, such as digital tools and services, to accommodate for increased product complexity and facilitate customization. Firms like Archetype III redefine the marketing channel with digital solutions. These firms not only realize efficiency gains from automating activities and processes. They also intensify relationships with end-users, potentially disintermediating distributors, and add new business models enabled through digital means.

4.2. Opportunities by archetype

Opportunities common for all three archetypes include primarily saving costs through improved process efficiency, responding to expectations and standardization efforts by channel partners, and providing more information to existing customers. Primarily with electronic commerce solutions, through open webshops or closed ordering platforms, order processing can become faster and more reliable compared to today's practices: "*We really receive hand-written orders via fax, it is not uncommon.*" One executive expects "*30 to 60% fewer resources if processes like ordering are automated*". Additionally, distributors organized in trading organizations are implementing digital ordering systems to standardize orders, and manufacturers complying with these systems stand to benefit. Finally, existing customers and end-users are increasingly looking for product information online, even for products like building materials: "*For our photovoltaic products, digital marketing channels are increasingly important. These products require comprehensive information for end-users.*"

In addition to these opportunities, firms like Archetype II understand the importance of digital touchpoints for applicators in the marketing channel, like construction companies and

artisans: *"We have understood that the applicator's interaction point on the construction site will become more digital."* This supports the increasing complexity and customization of products: *"Because there is so much complexity, you have to digitize. Otherwise, normal applicators would not cope with the number of different systems."* However, firms like Archetype II do not want to disrupt the existing marketing channels: *"We are very happy with the good partnership along the value chain with the distributor and applicator."* Because distributors supply services such as logistics and financing of small businesses, they are valued partners in the marketing channel: *"The dealer has many capabilities that we do not have."*

In addition to opportunities identified by Archetype I, firms like Archetype III identify a different set of opportunities to redefine marketing channels. These opportunities include offering additional services previously provided by other channel members, potentially disintermediating them: *"In an early phase, we want to lock in the customer and demonstrate our know-how."* Moreover, they have a very customer-centric business model and establish new, digital business models, targeting respective decision-makers for their products, which can be end-users, but also architects or applicators. To target these decision-makers, firms like Archetype III systematically generate leads through digital channels: *"We use all the typical tools like platforms, paid advertising and organic traffic."*

4.3. Challenges by Archetype

Challenges common for all three archetypes are due to industry characteristics and established practices and structures. First, all focal firms note caution and reactivity among channel members: *"Everybody is slowing it down"*, one executive stated. Second, the industry is highly fragmented, especially on the levels of distributors and applicators. Therefore, many different players would have to adopt new digital channel solutions. Third, existing structures have developed over decades, and firms often rely on established, face-to-face business relationships: *"There are well-established sales channels to conduct the business. The business is a handshake-business"*. Firms like Archetype I and II identify additional challenges that make the implementation of digital channels difficult. They often encounter difficulties with data quality, due to the lack of a joint data standard in the industry. In addition, distinct product attributes make logistics challenging. Products are often complex, customized, and require expertise to apply or install. The products are bulky, heavy, and, therefore, costly to transport, which requires advanced logistical capabilities. *"Logistics are the largest challenge,"* one executive described.

Archetype III-firms recognize two challenges in addition to industry-wide ones as identified by all firms, and uniquely work around these challenges. These two challenges are the high costs for applicator firms to implement advanced software and the struggle for manufacturers to build or hire the new required capabilities. Previously discussed challenges mentioned by Archetypes I and II appear to be to industry-wide, common challenges supposedly outside of each focal firms' power to overcome. Archetype III-firms, however, find ways to mitigate some of these challenges. For example, to alleviate the challenge of fragmentation, Archetype III-firms target fewer, large, and integrated customers with their new digital services. Further, Archetype III-firms mitigate low adoption among applicators due to the high investment costs of digital purchasing software. Hence, Archetype III-firms provide applicators with a holistic digital toolkit, including digital ordering platforms and adequate mobile applications: *"Our partner portal supports our installers to order via the online shop or an app and allows them to make their processes more efficient."*

Table 1: Summary of opportunities and challenges for identified archetypes

	Archetype I Increasing efficiency in the marketing channel	Archetype II Diversifying the marketing channel	Archetype III Redefining the marketing channel
Opportunities	<ul style="list-style-type: none"> ▪ Reduce costs and increase overall process efficiency ▪ Respond to expectations or requirements by channel partners ▪ Provide more information and better services to existing customer base 		
	<ul style="list-style-type: none"> ▪ Establish touchpoints for new customer base among downstream channel partners 		
	<ul style="list-style-type: none"> ▪ Reach end customer directly by removing intermediaries from the marketing channel ▪ Enable growth through business model upgrades 		
Challenges	<ul style="list-style-type: none"> ▪ Caution and reactivity among players ▪ Existing, well-established structures relying on personal interactions and limited pressure to change ▪ Fragmentation of downstream level partners on the distributor and especially on the applicator level 		
	<ul style="list-style-type: none"> ▪ Difficulty with data quality and technology implementation ▪ Logistical challenges to ensure local and timely deliveries ▪ Distinctive product attributes in need of explanation, expertise and application support 		
	<ul style="list-style-type: none"> ▪ High investment costs of digital tools and processes among small downstream level partners ▪ Difficulty in attaining necessary capabilities 		

5. Discussion and Implication

This study's key insight is that with different identified opportunities and challenges of digital marketing channels, subsequent intents of digitalizing marketing channels differ. While some firms aim to implement electronic commerce technologies to facilitate purchasing and reduce cost, others use digital channels to disintermediate downstream channel partners and upgrade their business model. Prior research has identified opportunities (e.g., Gielens & Steenkamp, 2019) and challenges (e.g., Neslin et al., 2006) of digital marketing channels. But the literature on digital marketing overall is fragmented (Yadav & Pavlou, 2014), and a comprehensive definition of digital marketing channels is unclear. Gaps also remain in understanding digitalization efforts of marketing channels, which are characterized by complexity, fragmentation, and interdependence among channel members.

I make two contributions to existing marketing channel research. First, I develop an interdisciplinary definition of digital marketing channels. Second, I induct a framework to deepen the understanding of firms' considerations when digitalizing marketing channels in complex, fragmented, and interdependent channels. Marketing scholars have defined and

investigated many aspects of digital marketing, but the definition of digital marketing channels, especially for a context involving interactions between firms and businesses, remains unclear (Kannan & Li, 2017). Utilizing definitions from information systems research for inter-firm ordering technologies (Sila, 2015; Teo et al., 2003), I provide a comprehensive definition of digital marketing channels in fragmented business-to-business and business-to-consumer contexts. This comprehensive definition is based upon the structuring framework by Yadav & Pavlou (2014), who group digital marketing interactions by involved parties, e.g., firms and firms or firms and consumers (Yadav & Pavlou, 2014).

The inducted framework extends considerations by Gielens & Steenkamp (2019) on digital disintermediation by brands due to the rise of e-commerce models. Their set of opportunities and challenges is limited to firms' internal considerations, such as pricing power, direct interaction with consumers, and improved efficiency or lack of scale and financial resources (Gielens & Steenkamp, 2019). This study identifies additional opportunities targeted towards all involved downstream channel partners, such as distributors and applicators, but also end-users. Furthermore, the inducted framework broadens challenges identified by Neslin et al. (2006), by adding industry and product characteristics and taking into account the fragmentation and complexity of the marketing channel (Neslin et al., 2006).

Lastly, this study provides managerial insights for the construction industry and beyond. Prior literature has proposed channel strategies for manufacturers to actively manage channel conflicts, which include the promotion of channel partners or diverting orders to distributors (Webb, 2002). In addition to these strategies, the presented framework illustrates two insights. First, identified opportunities of manufacturers and their subsequent intents of digitalizing marketing channels vary. Accordingly, strategic initiatives towards downstream channel partners vary among manufacturers, and executives should develop precise and targeted digitalization initiatives, which exploit the identified opportunities. Second, overcoming challenges, which inhibit the digitalization of marketing channels on the levels of distributors and applicators, can improve overall performance and deepen channel ties. It can also equip manufacturers with critical capabilities and a better understanding of end-users and decision-makers of their products. These approaches could help the building material industry, and construction sector overall, to catch up on current deficiencies in digitalization.

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The Role of Positive and Negative eWOM for Restaurant Information Search Process and Visit Intentions

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Abstract:

This study examines the effect of positive and negative effects of eWOM in the context of restaurant services. We use information search processing theory in the consumers' decision-making process, theory of reasoned action, as well as the role of reference groups as a background. Empirical study conducted throughs survey (Study 1) and an experiment (Study 2) has shown that a negative eWOM has a stronger role in importance of online information search for visit-decision making, while within experimental study Facebook friend recommendation presents a main source of information in this process. Based on findings, we present theoretical and practical contributions.

Keywords: *eWOM, reference group, information search*

1. Introduction

Understanding purchase-decision process of customers in predicting their future intentions has been the topic not only of many theories (Han and Kim, 2010), but also known to be intricate from both practical and research perspective (Lam and Hsu, 2006). Marketing literature distinguishes five different and related phases, imposing information search as the second phase (Kotler, 2002). Generally speaking, consumers tend to fulfill their needs according to their rational choice, which is well recognized in the paper offered by Simon (1955) who had formulated three decision-making steps to be of immediate importance for this choice: intelligence, design and choice. The logic behind says that after need recognition (intelligence), in the design phase, customers structure the need and make their final decision choosing the best solutions that meet defined criteria (choice).

All of these approaches seem to have main characteristic in common which circles around the question what are the crucial elements to be considered when identifying how the need will be satisfied. In this context, prior research has emphasized the role of product or service online reviews on purchase decision. Chevalier and Mayzlin (2006) have concluded that the number of reviews is positively related to online book sales. This conclusion is akin to the one offered by Zhang et al. (2014) who investigated the influence of online review feature set on behavioral intentions. The relevance of product information has been found to be important in the paper by Moskowitz (1994) proving their power to modify an acceptance by customers. In addition to main feature of prior research, they have been mostly focused on the final phase of the process (Han and Ryu, 2012; Rödiger, Plaßmann, & Hamm, 2016), different antecedents (Green and Chalip, 1998; Kujawińska, Rogalewicz, & Diering, 2016) or a wide range of research setting such as airline (Wang, 2004), food (Graham and Jeffery, 2011) or fashion industries (Cengiz, 2017). Nevertheless, as stated by Jang et al. (2012), the use of product or service reviews at the individual level in different stages of purchasing process has been still unexplored. This is why the central tenet of this study is positioned through online information search considering positive and negative word of mouth (hereinafter WoM) to explore how they affect purchase decision-making.

We have applied the two-phase procedure to test the main assumption of the study. First, quantitative research tests the model, which posits that positive and negative eWOM act as moderators in relationship between online restaurant information search (ORIS) and relevance of social networks for restaurants visit decision-making (RDM). Second, our online experiment provides an insight into the effect of positive and negative eWOM, shaped as Facebook page recommendations and Facebook friend recommendations, on an appearance of stronger or weaker intention to visit a restaurant. This study contributes to the building of existing knowledge attempting to understand the effects of the positive and negative eWOM on consumer decision-making, and in that way contribute to understanding of this new and important communication mix element. From the practical point of view, the main findings of the study shed light on importance of consumers' opinion regarding services and the way in which it is delivered, as their experiences, once shared and public, become truly relevant for business building.

2. Research Background

The main preposition of our conceptual model has been found in the Theory of reasoned action, according to which behavioral intentions, and behavior as their consequence, depend on attitude and subjective norms (Fishbein and Ajzen, 1975). In other words, the theory sheds light on the nature of relationship between these concepts (Fishbein, 1967). In context of this study, ORIS presents an attitude, which people may have as a result of previous experience

regarding selection of a restaurant. The experience has been made by their own, or it relies on experience shared by other people. This assumption could be incorporated within the claim provided by Ajzen and Driver (1991) who have conceptualized an attitude as the feature that is conditioned by beliefs regarding the repercussions. In this model, the attitude is affected by subjective norms. As outlined in the paper by O'Neal (2007), subjective norms are how individuals perceive a certain social influence, while the main outcome of this influence is delivered through the specific behavior. In relation to our model, subjective norms present positive and negative eWOM, as they present form of social influence, which people usually seek and follow. Finally, we see our relevance of social networks for restaurants visit decision-making as behavior element of the theory.

In further consideration of the proposed model, a central role belongs to eWOM, the construct that has been seen as an important element assessed by clients in the pre-purchase phase (Mangold, 1999). With the emergence of the Internet and, more importantly, increased popularity of social network sites, eWOM was established as a new communication tool. Hennig-Thurau et al. (2004) have defined eWOM as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made to be available to a multitude of people and institutions via the Internet." Furthermore, it is important to differentiate between positive and negative eWOM. "Positive eWOM might include making others aware that one does business with a company or store and making positive recommendations to others about a company" (Brown, 2005). On the other hand, negative eWOM is the exact opposite with consumers sharing negative experiences with brands. "Positive eWOM communications can improve consumers' attitudes towards a product/service and increase sales, while negative eWOM can cause serious and sometimes even irreversible damage to the business" (Ismagilova, Dwivedi, Slade & Williams, 2017). As a consequence recent trends, eWOM has proved to be more effective in some situations than the traditional marketing tools of personal selling and various types of advertising (Katz & Lazarfeld, 1955; Engel, Blackwell & Kegerreis, 1969). Prospective customers visit web sites and read reviews from other customers to learn more about a product before making a purchase (Doh & Hwang, 2009). Thus, eWOM extends customers' choices for gathering information about products and services from other customers. In other words, the electronic environment serves as an innovative venue for gathering reliable information, which is in line with the assumption that social networks represent a basic vehicle for eWOM (Chu & Kim, 2011).

Intangibles such as restaurant services cannot be evaluated prior to consumption experience; thus consumers tend to rely on eWOM to reduce their level of perceived risk and uncertainty (Klein, 1998; Lewis & Chambers, 2000). Litvin et al. (2004) suggested that tourists' restaurant selections are predominantly influenced by the recommendations of friends or relatives and recommendations of staff at a hotel, with surprisingly few decisions being based on the influences of more formal media such as guide books and advertisements in magazines or newspaper, which may eventually lead customers to become dependent on the interpersonal influence of eWOM (Lewis & Chambers, 2000). Sussking (2002) have found that customers who reported problems with their food had engaged in significantly more negative WOM communications as compared with those who had had problems with the service. Furthermore, Zhang et al. (2014) have proved that food taste, restaurant environment and service have an impact on customer positive eWOM, whereas food taste, physical environment and price have an impact on negative eWOM. Hence, the performance of attributes has an asymmetric impact on positive and negative eWOM for the restaurant industry. Interestingly, studies show that the impact of negative eWOM is likely to be more influential than that of a positive one (Gruen, et al., 2006; Lee et al. 2008; Boo & Kim, 2013).

Wetzer et al. (2007) indicated that negative emotions are related to negative goals (e.g. warning and revenge) for negative WOM and that those goals may influence the content of the communication that is spread to others, whereas negative goals with negative emotions are stronger than positive goals (e.g. entertaining experiences). According to the study done by Dichter (1966), positive WOM is likely to increase customers' purchase intentions for new products/services, because it reduces the risks involved in the purchase. Moreover, the unique characteristics of eWOM communication may leverage the power of positive eWOM to influence customers' decision-making processes. In a particular case of restaurant services, recommendations usually respond to the simple question "Where to eat?", which has become an integrated part of the social network sites structure. In particular, some social network sites have specialized in giving such, user-based, recommendations. Therefore, we hypothesize:

H1: *Online restaurant information search is positively related to the relevance of social networks for restaurant visit decision-making.*

H2: *(a) Positive, (b) Negative e-WOM are moderating the effect of the online restaurant information search on the relevance of social networks for restaurant visit decision-making.*

H3: *Positive (vs. negative) eWOM effect in a form of (a) Facebook page recommendation, (b) Facebook friend recommendation will prompt stronger (vs. weaker) intention to visit a restaurant.*

The overall conceptual framework with all hypotheses is presented in the Figure 1.

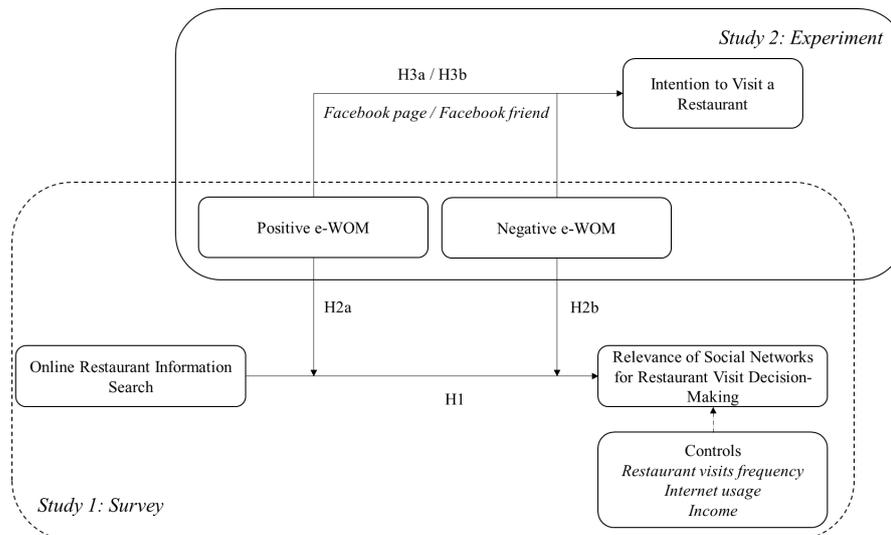


Figure 1. Conceptual two-phase procedure framework

3. Methodology

We tested the outlined conceptual model in two steps presented, by conducting two consequent studies. First, we have pursued a quantitative survey (Study 1) measuring positive/negative e-WOM, online restaurant information search process and relevance of social networks for restaurant visit decision-making. We control for restaurant visits frequency, the Internet usage and income of respondents. Questions were adapted from already existing studies (e.g. East, Hammond & Lomax, 2008).

The survey was conducted online, and 202 usable questionnaires returned in time for the analysis (25% response rate). Sample is balanced when it comes to gender structure, with

55% female and 45% male respondents. Age range of respondents is between 17 and 65, with the average age being 31. When it comes to education, 49% of the respondents have university degree, while 25% have masters-level degree. 75% of the respondents are employed, 15% students, 8% unemployed and the rest are retired. When mentioning the frequency of the Internet usage, 43% reported to use the Internet 3-6 hours per day, while 10% stated they use the Internet more than 12 hours in a day. Majority of the sample, 39%, visit restaurants 3-5 times, followed by 28% ones who visit restaurants 2 or less times a month. There were 18% respondents who visit restaurants 5-10 times and 8% ones who visit restaurants 10-15 times a month, while the rest are visiting restaurants almost daily. Average spending per restaurant visit is between 50 and 100 EUR.

In our second study (Study 2), we contextualized the research even more, by conducting an experiment that involved an example of a restaurant and controlling for two conditions: (positive and negative) eWOM and Facebook (page and friend) recommendation. We used a between-sample experimental design where respondents were randomly assigned to conditions. The experiment was available online and when respondents entered the designated link, they were first presented with the short and informative Youtube video of the selected real restaurant. After they have watched the video, respondents were randomly assigned to first view a Facebook page recommendation for that restaurant (with separate positive and negative condition).

Facebook page recommendation was displayed on the screen with clearly visible overall rating score (i.e. stars) which was set to 1.9 in the negative condition and to 4.4 in the positive condition, and then two comments by unknown persons were displayed (positively/negatively) describing the restaurant. When proceeding to the next step, respondents were again randomly assigned to the following scenario question: "After all that you have previewed, you have also read on Facebook that your friend had a positive/negative experience with this restaurant." Finally, the respondents were asked how like it is that they would intend to visit this restaurant in the next period.

There were 140 participants in the experiment in total, with minimum 28 and maximum 38 of respondents belonging to each of the four conditions. Respondents' age ranged from 19 to 63, with the average age of 32 and there were 58% of female respondents.

4. Results

4.1. Results of the Study 1

Before assessing the conceptual model of our quantitative study, we have conducted the test of reliability of the multi-item constructs used by examining the internal consistency coefficient (Cronbach's alpha). All coefficients have had acceptable values above 0.80 (Nunnally, 1978). For the purpose of further analysis, we have aggregated all multi-item constructs based on the average value.

In order to empirically verify our model, we used the PROCESS routine in SPSS (Hayes, 2017; Preacher & Hayes, 2008). Specifically, we estimated a moderation model (Model 2) with 5,000 bootstrap samples and 95% bias corrected confidence intervals. Our findings are presented in Table 1.

H	Effects	Coefficient (S.E.)
<i>Direct effects</i>		
H1	Online Restaurant Information Search	0.293 ^{***} (0.073)
	Positive eWoM	0.289 ^{***} (0.079)
	Negative eWoM	0.143 (0.080)

<i>Moderating effects</i>		
H2a	Online Restaurant Information Search x Positive eWoM	-0.078 (0.082)
H2b	Online Restaurant Information Search x Negative eWoM	0.152** (0.082)
<i>Controls</i>		
	<i>Restaurant Visits Frequency</i>	0.036 (0.060)
	<i>Internet Usage</i>	0.057 (0.068)
	<i>Income</i>	-0.109 (0.082)
R^2		0.39

Notes: Dependent variable: relevance of social networks for restaurant visit decision-making;
 *** - $p < 0.001$, ** - $p < 0.05$.

Table 1. Empirical results

The results from Table 1 indicate that online restaurant information search positively and significantly influences relevance of social networks for decision-making related to the restaurant visit ($B = 0.293$, $p < 0.001$). Thus, we have confirmed H1. Interestingly, positive eWOM does not act as a moderator of the main relationship, but has a direct and positive effect on the relevance of social networks for making a decision about the visit ($B = 0.289$, $p < 0.001$). In contrary, negative eWOM acts as a pure moderator of this relationship and further strengthen the effect of online information search on the relevance of social networks for the decision-making process ($B = 0.152$, $p < 0.05$). This moderating effect is illustrated in Figure 2, from which it can be clearly seen the lower negative eWOM, the lower levels impact of ORIS for RDM. Also, when there is a high negative eWOM the process of information search and its effect on relevance of social networks for decision-making becomes higher and stronger.

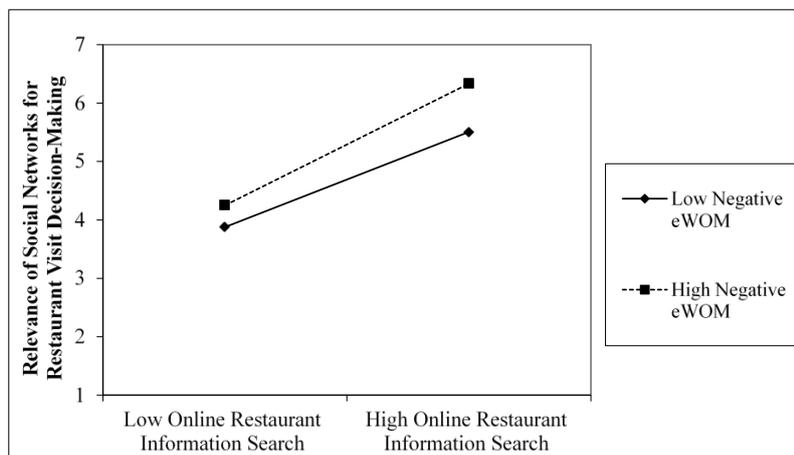


Figure 2. Moderating effect of negative eWOM

The framework has a strong explanatory power since it explains 39% of the variance in the relevance of social networks for restaurant visit decision-making. Interestingly, none of the control variables are significant for the model, which shows the model robustness.

4.2. Results of the Study 2

In order to assess the results of the experiment, we have utilized ANOVA Facebook friend recommendation and Facebook page recommendation as between subject factors for the intention to visit a restaurant. The main effect of Facebook friend recommendation is

significant ($F(1,57) = 16.32, p < 0.001$), while the main effect of Facebook page recommendation on the dependent variable is not ($F(1,2) = 0.32, ns$).

In order to explore the effect of the two types of recommendations and to test our H3, we compared the means in the intention to visit a restaurant for four different conditions:

C1: the mean for the negative Facebook page recommendation and negative Facebook friend recommendation group ($N = 28$) = 3.50 (Std. dev = 1.95);

C2: the mean for the negative Facebook page and positive Facebook friend recommendation group ($N = 37$) is 4.92 (Std. dev = 1.75);

C3: the mean for the positive Facebook page and negative Facebook friend recommendation group ($N = 37$) is 3.81 (Std. dev = 1.99) and

C4: the mean for the positive Facebook page and positive Facebook friend recommendation group ($N = 38$) is 4.97 (Std. dev = 1.81).

The mean difference between the Facebook friend recommendations in the negative Facebook page condition was -1.42 ($p < 0.001$) and the strongest effect of difference is observed particularly here, while the mean difference in the positive Facebook page recommendation condition was -1.16 ($p < 0.001$). Figure 3 presents these findings.

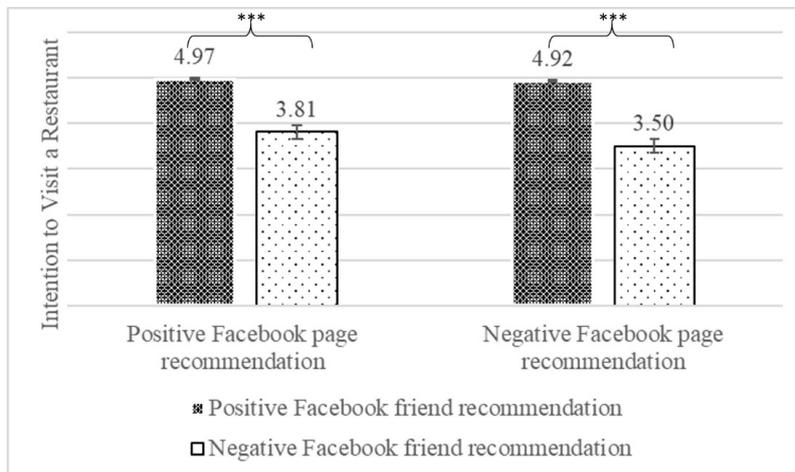


Figure 3. Experiment results

Consequently, we can conclude that our H3 in the case of Facebook friend recommendation (H3b) has been confirmed. For the Facebook page recommendation there is no significant difference in the intention to visit a restaurant with respect to the valence of eWOM.

5. Discussion and Conclusions

This two-step conceptualized study has examined the effect of positive and negative effects of eWOM, as featured as an important moderator (De Matos & Rossi, 2008), in the context of restaurant service. At the outset, the findings from empirical study (Study 1) have supported the Theory of reasoned action (Fishbein and Ajzen, 1975). More specifically, the relevance of social networks for restaurant visit-decision making (behavior) depends on attitude (collected information) and subjective norms (positive and negative eWOM. It is proven that only negative eWOM behaves as a moderator within this relationship. In case of high level of a negative eWOM, the process of ORIS and its effect on RDM becomes higher and stronger. This is in line with the results of the study by Charlett, Garland and Marr (1995) and it also provides an upgrade to the findings offered by Vázquez-Casielles, Suárez-Álvarez

& del Río-Lanza (2013). Park and Lee (2009) have also proved a greater effect of a negative eWOM, but for experience goods, while in search goods setting this effect is weaker. The results of our study complemented their findings by offering this effect to be more relevant for a search phase. Thus, we have confirmed H1 and H2b, while it is noted that positive eWOM does not act as a moderator of the main relationship (H2a), but has a direct and positive effect on the relevance of social networks for making a decision about the visit.

Within our Study 2, we conducted an experiment analysing positive and negative eWOM effect in a form of Facebook page and friend recommendation using between-sample experimental design. We have revealed that the main effect of Facebook friend recommendation is significant, while for Facebook page recommendation this is not the case. Facebook friend recommendations, according to these results, act as crucial mechanism which people rely on in their intention to visit a restaurant. Furthermore,

This study offers several contributions. Most of the previous studies have placed eWOM to be an antecedent (Abubakar & Ilkan, 2016; Yoo, Sanders & Moon, 2013) or an outcome (Wallace, Buil & de Chernatony, 2014) in variety of research contexts. Our study, from theoretical perspective, improves existing literature as it reveals an additional role in interesting research settings. Also, our study extends the applicability of the Theory of reasoned action. Although its role has been found to be important in consumer research (Bagozzi, Baumgartner & Yi, 1992; Oliver & Bearden, 1985), in recent years only few studies have incorporated its relevance into their research models (Hussain, Rahman, Zaheer & Saleem, 2016; Procter, Gainsbury, Angus & Blaszczynski, 2019), leaving it outside of eWOM context. From practical point of view, we believe that the main findings of our study could be useful to restaurant managers and owners. As influential tool, eWOM presents a path to potential target market. Knowing what motivate customers provide a positive feedback, additional effort should be paid to maintaining social networks updated in order to attract customer opinion.

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Factors Contributing to International Student Loyalty – Is It Satisfaction With The University Solely?

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Abstract:

In the past several attempts have been made to understand factors influencing foreign students' satisfaction and loyalty at higher education institutions. However, previous research have not treated the examination of factors influencing both school-related and non-school-related satisfaction, and their effect on loyalty in much detail. This research sheds new light on the institution- and faculty-specific school-related and non-school-related factors influencing foreign student satisfaction and loyalty. Data was analysed with PLS path analysis and interestingly, both school-related and non-school-related satisfaction factors had a significant positive effect on student loyalty. The most striking result to emerge is that satisfaction with non-school-related aspects influence loyalty more significantly than their school-related counterparts. Evidence from this study highlights a unique nature of foreign student satisfaction and loyalty and complements those of earlier studies.

Keywords: *satisfaction, loyalty, education*

1. Introduction

Over the past century, there has been a dramatic increase in the number of foreign students all around the world. Therefore, internationalization has become fundamental on both national and institutional levels. A primary concern of HEIs is to continuously target foreign students with their marketing initiatives, as students entering higher education take numerous factors into account before deciding which HEI to choose. Moreover, it is extremely important for them to get to know what students expect and how much students are satisfied with the results of their decisions, because it is going to be the key to the long-term success of the HEI on the international market.

Researchers have made serious efforts to discover foreign students' satisfaction and loyalty. Some studies reveal that students do not only spend their days inside a foreign HEI. Besides studying, free-time activities and entertainment constitute an important part of students' well-balanced lives. However, there is a small number of studies that differentiate between school-related and non-school related aspects of foreign students' satisfaction and loyalty. Therefore, this study therefore set out to uncover foreign students' institution- and faculty-specific satisfaction and loyalty at a chosen university, differentiating between school-related and non-school-related aspects satisfaction.

2. Literature Review, Development of the Theoretical Model

Literature is extensively concerned with the satisfaction of consumers with certain purchased products or services that satisfy a certain need, desire or aim (Oliver et al., 1997). The basis of satisfaction is the comparison of expectations and consumer experience (Churchill & Suprenant, 1982; Oliver, 1985; Yi, 1990; Elkhani & Bakri, 2012). However, there is no common agreement on the definition of satisfaction (Hetesi, 2003). As higher education is viewed as a service, the nature of satisfaction with services has to be taken into account (Zeithaml, 1981; Parasuraman et al., 1991). In case of services, set higher criteria, among which there is experience and trust (Zeithaml, 1981). There are several methods for the measurement of expectations and performance. The SERVQUAL method is designed to measure both expectations and satisfaction with performance (Parasuraman et al., 1991), while the SERVPERF model only measures performance (Cronin & Taylor, 1994). We based the development of our model on the latter method.

Consumer satisfaction is important, but is not always enough to create loyal customers to a certain product or service (Reichheld et al., 2000). Scholars initially claimed that loyalty is equal to satisfaction and retaining customers (Reichheld & Sasser, 1990; Reichheld, 1996). Others stated that loyalty can be measured by repurchase (Tellis, 1988; Reichheld et al., 2000; Oliver, 1999), or the establishment and retention of customers (Hetesi, 2007). According to the complex approach of loyalty, word-of-mouth recommendation (WOM) is used by customers to promote the product or service to others (Oliver, 1999; Reinartz & Kumar, 2002; Reichheld, 2003). In our current study, we rely on the latter definition. Regarding the measurement of loyalty, there are several approaches. According to Reichheld (2003), only one question is able to determine whether the company at hand will be successful or not, and its customers would be loyal or not.

Many studies have proven the relationship between the satisfaction and loyalty of foreign students (Alves & Raposo, 2009; Elliot & Healy, 2001; Wiers-Jenssen et al., 2002; Lenton, 2015; Cardona & Bravo, 2012; Owlia & Aspinwall, 1996; El-Hilali, et al., 2015; Lee, 2010; Schertzer & Schertzer, 2004; Giner & Rillo, 2016). Word-of-mouth activities reportedly play an important role in the loyalty of students (Alves & Raposo, 2009). However, there is very little differentiation between school-related and non-school-related aspects of satisfaction in each research. The number of studies focusing partly or solely on non-school-related aspects is negligible (Schertzer & Schertzer, 2004; Yang et al., 2013; Mihanovic et al., 2016; Machado et al., 2011). Moreover, the factors appearing in these studies are mostly closely related to classroom aspects of satisfaction (Yang et al., 2013). However, these studies reveal that students' happiness heavily depends on factors related to school and non-school elements as well (Schertzer & Schertzer, 2004). Though in the studies of Schertzer and Schertzer (2004), school-related and non-school-related aspects differ, the subjects of the research were domestic students not foreign ones. Mihanovic et al. (2016) investigated students' satisfaction with their accommodation, entertainment and free-time activities in a more in-depth way. While Machado et al. (2011) dealt with satisfaction of students with demographic factors, such as the city and the international atmosphere of the city.

Based on the presented literature, we claim that satisfaction with non-school-related aspects of foreign students' study abroad experience affects their loyalty positively.

Hypothesis 1: Satisfaction with non-school-related aspects affects loyalty positively.

As it was previously discussed, the majority of studies concerned with foreign student satisfaction and loyalty concentrates solely on factors connected to the university (Lee, 2010). These studies claim that the most important aspects of HEIs are the availability of study-

programs, the location, size and complexity of the HEI, the quality of education (Huybers et al., 2015), the feedback from and communication with the instructors (Jager & Gbadamosi, 2013), the appropriate study schedule, the student supporting facilities, the physical environment and equipment (Wiers-Jenssen et al., 2002). Based on these studies we propose that factors closely related to the university and the satisfaction with these factors have an effect on foreign students' loyalty.

Hypothesis 2: Satisfaction with school-related aspects affects loyalty positively.

A number of authors have studied the elements of service quality by their own arbitrary dimensions. Elliot and Healy (2001) examined foreign student satisfaction based on 11 dimensions, effectiveness of higher education, university atmosphere, university life, supporting facilities, support for the individuals, effectiveness, financial support effectiveness, administrative effectiveness, safety, service excellence, and student-centeredness. Lee (2010) researched satisfaction with HEI quality and concluded that it can vary based on the students' country of origin. While El-Hilali et al. (2015) investigated the image of the university, higher educational study program and teaching methods, Lenton (2015) looked into the matter of education, students' exams, feedback for students, institutional support for students, the institution, the resources and the individual development of students. Cardona and Bravo (2012) applied a model examining teaching, the teaching process, infrastructure, interaction and communication between teachers and administrative workers, and the quality of atmosphere. One of the most comprehensive study was conducted by Owlia and Aspinwall (1996), in which they differentiated between six dimensions of satisfaction with higher education. These are the tangibility (equipment and facilities), competence (teaching expertise, practical and theoretical knowledge), attitude (understanding students' needs), content (curriculum), delivery (effective presentation, feedback), and reliability (trustworthiness). Based on the literature, we examine satisfaction based on the comprehensive classification of Owlia and Aspinwall (1996).

Hypothesis 3a: Satisfaction with tangibles has a positive effect on school-related satisfaction.

Hypothesis 3b: Teachers competence affect school-related satisfaction positively.

Hypothesis 3c: The content of the curriculum has positive effect on school-related satisfaction.

Hypothesis 3d: The attitude of teachers and administrative workers have positive effect on school-related satisfaction.

Hypothesis 3e: Trust in teachers and administrative workers affect school-related satisfaction positively.

Hypothesis 3f: The delivery method of the curriculum affects school-related satisfaction positively.

3. Measurement, Methodology

A variety of methods are used to assess student satisfaction and loyalty. The measurement of the variables appearing in our study and the design of the questionnaire were based on the theoretical framework we proposed in the previous chapter. We divided satisfaction into two categories, school-related and non-school-related satisfaction. The measurement of school-related satisfaction was based on the categorization of Owlia and Aspinwall (1996), while non-school-related aspects were measured by the factors appearing in the studies of Mihanovic et al. (2016) and Machado et al. (2011). Loyalty towards higher education institutions is mostly measured by the complex approach that has been detailed before (Ostergaard & Kristensen, 2006; Alves & Raposo, 2009). Therefore, we also utilize this approach in our study and use the scales appearing in the research of Ostergaard and Kristensen (2006). The above mentioned factors were measured by 18 5-point Likert scales in the questionnaire.

The chosen quantitative study included an online questionnaire and was conducted at the University of Szeged, Faculty of Economics and Business Administration, June 2017. The subjects of the research were those foreign students, who study in a full-time programme at the Faculty of Economics and Business Administration. The questionnaire was sent out in emails to the students' e-mail addresses. Based on the registry of the faculty administration, each full-time foreign student got the questionnaire. The population consisted of 105 full-time foreign students altogether, who got two reminding emails of the survey. The final sample consisted of 67 students.

In order to test the hypotheses, latent variable modelling is needed. Therefore, the applied methodology is structural equation modelling. This method is widely used in studies concerned with higher education (Lee, 2010; El-Hilali et al., 2015; Giner & Rillo, 2016). In our study PLS path analysis can be used (Hair et al., 2014), because certain indicators cannot be considered to have normal distribution (in case of Kolmogorov-Smirnov and Shapiro-Wilk tests and each variable $p < 0,01$). SmartPLS 3 (Ringle et al., 2015) software was used for the PLS path analysis.

4. Results

Regarding the results of the *outer model*, the constructs' validity was examined by the Cronbach-Alfa and CR (composite reliability) indicators. From the results we concluded that

each construct reaches the minimum value ($>0,6$ Hair et al., 2009). Standardized factor weights, the AVE (average variance extracted) indicators were used to examine convergence validity. The latent variables exceed the minimum value ($>0,5$ Hair et al., 2014) in each case. Therefore, the existence of the six constructions is validated.

Based on the test of Fornel and Larcker (1981), the discriminant validity was also examined, which means that the variables' AVE value had to be higher than the squares of the correlation coefficients between the construct and the other constructs. This criterion is met in the case of each latent variable. Based on the results of the outer model, the existence of the latent variables is justified and each indicator connected to the latent variables represents the same phenomenon.

In case of the *inner model* and its results, the testing of path coefficients' significance was conducted with the help of bootstrap algorithm (Hair et al., 2014). The results show that

- the content of the curriculum ($t=0,257$, $p=0,209$),
- the delivery method of the curriculum ($t=1,440$, $p=0,150$),
- trust in teachers and administrative workers ($t=0,377$, $p=0,706$),
- tangibles ($t=1,089$, $p=0,276$)

do not have a significant effect on school-related satisfaction at a five percent significance level.

Conversely, based on these results, it is advisable to leave the content of the curriculum, the delivery method of the curriculum, trust in teachers and administrative workers, and tangibles out of the model. Leaving out the non-significant effects from the model, each remaining path has a significant effect at a five percent significance level (Table 1.).

Table 1. Testing the significance of path coefficients appearing in the final model.

Path	Path coefficient (original sample)	Mean of path coefficient (from bootstrap sample)	Standard deviation of path coefficients	t-value	p-value
attitude -> school-related satisfaction	0,459	0,466	0,132	3,472	0,001
competence -> school-related satisfaction	0,391	0,389	0,132	2,963	0,003
school-related satisfaction -> loyalty	0,327	0,311	0,121	2,696	0,007
non-school-related satisfaction -> loyalty	0,452	0,475	0,111	4,063	$4,92 \cdot 10^{-5}$

Source: Own study

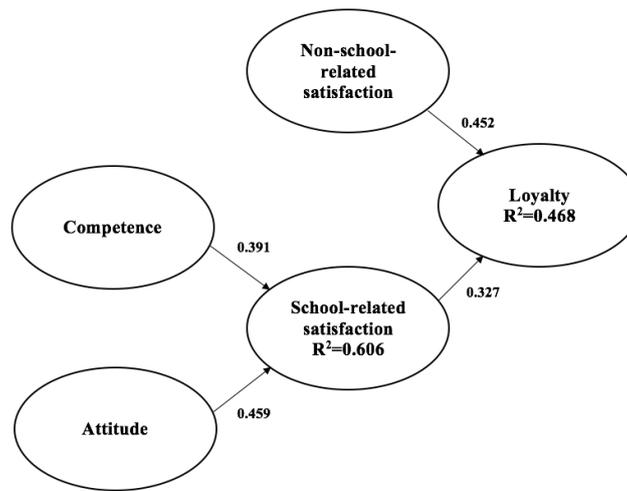
Taking only the significant effects into account, the final model can be seen on Figure 1. If we take a look at the direct effects and the standardized path coefficients that can be seen

on the arrows, we can conclude that the effects between the latent variables are positive in all cases.

The following statements can be made regarding the standardized path coefficients (β):

- Attitude ($\beta=0,459$) has a stronger effect on school-related satisfaction than competence ($\beta=0,391$).
- Non-school-related satisfaction ($\beta=0,452$) affects loyalty more than school-related satisfaction ($\beta=0,327$).

Figure 1. Satisfaction factors' effect on loyalty.



Source: Own study

Based on the values in the ellipses in Figure 1, the explanatory power in the model is average. It is also important to look at the significance of the effects between the variables based on the f^2 indicator, which examines the change in the endogenous variable's coefficient of determination by leaving out the exogenous variable (Hair et al., 2014).

Table 2. Significance of effects between latent variables.

Path	f^2
attitude → school-related satisfaction	0,290
competence → school-related satisfaction	0,210
school-related satisfaction → loyalty	0,145
non-school-related satisfaction → loyalty	0,276

Source: Own study

Based on the results in Table 2., we can conclude that each path has a medium effect. Regarding the strength of the paths, the attitude's effect on school-related satisfaction ($f^2=0,290$) and non-school-related satisfaction's effect on loyalty ($f^2=0,276$) can be emphasized in the model.

5. Summary

During our study we investigated foreign students' loyalty at the University of Szeged, Faculty of Economics and Business Administration. The Hungarian higher education has been becoming an increasingly important institution in the European higher education area, especially in the last five years due to the success of a Hungarian scholarship program (Stipendium Hungaricum Scholarship Program), which aims at increasing the number of foreign students in Hungary. HEIs have launched numerous English-language study programs and attracted thousands of foreign students. In order to keep the number of foreign students levelling up, it is crucial for each institution to get to know the different levels of satisfaction their students have.

In our study, we concentrated on two different aspects of satisfaction. We differentiated between elements closely related to the university and the service the university provides, and those elements that are not school-related, but can influence foreign students' satisfaction and loyalty. Previous studies have failed to examine school-related and non-school-related satisfaction. Therefore, in the current research our aim was to determine and measure these elements. Moreover, the relationship between satisfaction and loyalty was also investigated. The novelty of the study lies in the fact that non-school-related satisfaction's influence on loyalty has not been investigated in previous studies yet.

A quantitative study was conducted in the form of an online questionnaire. Hypotheses were tested with the help of PLS path analysis. We concluded that both school-related and non-school-related satisfaction have a medium effect on loyalty. Therefore, we accepted hypothesis 1 and 2. The third hypothesis was concerned with certain predictors of school-related satisfaction. Interestingly, out of the six factors, only two had significant effect on the school-related satisfaction. These were the attitude of teachers and administrative workers, and the competences of teachers. Based on these results it is evident that institutions accepting foreign students should concentrate on these two aspects extensively.

The most interesting result of the study is the relationship between non-school-related satisfaction and loyalty. Based on the opinion of students, non-school-related satisfaction has a more significant effect on loyalty than school-related satisfaction, which raises serious questions about the importance of investigating the whole study-abroad process of foreign students. In one hand, it can be concluded that higher education institutions have to pay close attention to discovering and developing non-school-related opportunities for foreign students when preparing their marketing strategies to ensure the satisfaction and loyalty of their students.

On the other hand, there are certain out-of-school elements that the university cannot control even though it has – according to the results – a stronger effect on the loyalty of foreign students.

The present study was conducted at one faculty specifically, which provided a deep insight into the satisfaction of students. However, it was beyond the scope of the current study to examine all 12 faculties of the University of Szeged. Even though the results carry a significant importance for the Faculty of Economics and Business Administration, conclusions can only be drawn regarding the faculty, not the whole university. Future research should be carried out to extend the study to the whole university and its 12 faculties, which would enable us to investigate the satisfaction and loyalty of foreign students at the University of Szeged.

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Insights into managing marketing mix: The perspective of artist-entrepreneur

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Abstract:

The paper explores artist-entrepreneur's opinions about the elements of the marketing mix of cultural product. Artists-entrepreneurs are professionals who manage their art business independently and require artistic and entrepreneurial knowledge. A qualitative study on the sample of ten artists-entrepreneurs was conducted to reveal their opinions and practices in managing a marketing mix. Results showed that artist-entrepreneurs perceive marketing only as a promotion. Also, they consider their artworks as cultural products. However, they believe that the price differs drastically because of the degree of intangibility for some cultural products. Networking, WOM, and social media are the most important promotional tools for artists. Distribution takes form of a live performance or product is delivered personally. Artist-entrepreneurs stressed the need for more business education in art schools.

Keywords: *marketing mix, artist-entrepreneur, qualitative research*

1. Introduction

In the European Union the significance of the cultural and creative industries (CCIs) is rising. It generates approximately €509 billion, representing 5.3% of the EU's total GDP, and employs more than 12 million full-time jobs, equivalent to 7.5% of Europe's workforce (European Commission Report, 2020). CCIs are knowledge-intensive and based on individual creativity and talent (European Commission, 2020). "As such, they include literary, visual and performing arts disciplines ("the arts"), but also a range of other creative fields where significant intellectual property creation is undertaken, such as design, film, television, radio, advertising, games, publishing and architecture" (Bridgstock, 2018, p. 123). Also, across the EU-28, one third (33 %) of the cultural workforce was self-employed in 2018 (European Commission, 2020).

As an academic discipline, arts marketing is focused on researching "the arts" as part of CCI. In the arts marketing, classic marketing concepts such as marketing mix are still underdeveloped (Colbert & St-James, 2014). It is because some marketing concepts cannot easily be transferred to arts sector (Butler, 2000; Lee, 2005b) and the continuous gap between theory and practice of arts marketing (Lee, 2005). Artists have a crucial role in the success of cultural organizations. Usually, these organizations are small and medium-sized companies (Colbert, 2014) and artists need to be entrepreneurial, so some concepts from entrepreneurial marketing, can be applied to the arts sector (Fillis, 2004) and *vice versa* (Fillis, 2010).

So, this paper aims to connect the concept of marketing mix in the context of arts marketing, with entrepreneurial marketing, focusing on artists as entrepreneurs. Artist-entrepreneurs are artists who are also managers and owners, who need to have both artistic and business skills and knowledge to survive in the art market.

After the introduction, the theoretical background deals with the (1) concept of entrepreneurial marketing in the arts and culture and (2) the concept of marketing mix in the arts and culture. The next part of the paper deals with exploratory, qualitative research of artist-entrepreneur's opinions. After the discussion, the paper ends highlighting conclusions.

2. Theoretical background

2.1 *Entrepreneurial marketing in arts and culture, the role of artists*

The concept of entrepreneurial marketing is related to small and medium-sized companies (Bjerke & Hultman, 2002) who have restrained resources, rely on creative and oftentimes unsophisticated marketing tactics and make heavy use of personal networks (Morris, Schindehutte and LaForge, 2002, 4). It can be applied to for-profit and non-profit companies (Morris et al., 2002). Although the concept of entrepreneurial marketing is not new, it has been neglected in marketing literature.

As pointed out by Fillis (2010, 97) "entrepreneurial marketing provides a way of addressing how creative use of limited resources in organisations of all sizes can result in achieving competitive advantage". It is defined as "the proactive identification and exploitation of opportunities for acquiring and retaining profitable customers through innovative approaches to risk management, resource leveraging and value creation" (Morris et al., 2002, 5). All entrepreneurs need to balance multiple aims and purposes (Bridgstock, 2013).

In the context of arts and culture entrepreneurial marketing has some similarities, but also differences with entrepreneurial marketing in business in general. Many arts organizations (like museums) are small and medium sized organizations (Hills, Hultman, and Miles, 2008) who have very limited resources (Fillis, 2004), and often don't have a marketing department or marketing professional (Komarac, Ozretić Došen and Škare, 2017). These differences occur because of the arts and culture specificities (Fillis, 2011). These specificities

are related to the three different groups of actors in the cultural production system (Venkatesh & Meamber, 2006). These are: (1) producers of cultural products i.e. the artists, (2) cultural intermediaries responsible for communication and distribution of cultural product to the consumer, and (3) consumers who give meaning to a product by transforming it into consumption experience.

Cultural organizations in the art, share two characteristics: (1) they reserve an important role for the artist and (2) they deal with the product of creative act (Colbert, 2014). Artists as the creators of the product, i.e. the art, are often self-employed and they lack the necessary skills for successfully running their business (Bridgstock, 2013). Additionally, they fear of being unprepared doing business; they lack financial resources and time (Calcagno & Balzarin, 2016). It is because "the arts entrepreneurship has tended to occupy a significantly less important position in arts programs" (Bridgstock, 2013, 125). Artist can have different drivers and aims in comparison to entrepreneurs in other sectors. So, the practice of entrepreneurship in the arts differs from the practice of entrepreneurship in business (Bridgstock, 2013).

2.2. Marketing mix in the arts and culture

Arts includes many different types of artistic and cultural product and services, such as music, dance, photography, industrial design, architecture, motion pictures and many more (Hill, O'Sullivan, O'Sullivan, and Whitehead, 2018). Mostly, cultural products are heterogeneous and complex, and highly intangible (d'Astous, Voss, Colbert, Carù, Caldwell and Courvoisier, 2008). Their management requires a special set of marketing knowledge and skills, specifically for the arts (Lee, 2005a).

The marketing mix for the art product is different and unique (Colbert & Ravanis, 2018). The art product has some distinctive characteristics; it is a cultural product related to human performance of a kind and tends to have strong location identities (Butler, 2000). The artistic product is created by the artist and not under the control of a marketing manager (Colbert, 2014) like in other businesses. The main issue for marketing management in the arts is related to the "sacredness" of the artistic work as the product (Colbert & St-James, 2014) which leads towards product orientation (Lee, 2005b). As pointed out by Butler (2000, 350) "the adoption of a market orientation by the artist may, in fact be counter-productive in artistic terms". It is because artistic experience (as a core product of the arts) "cannot be driven by market forces in the way commercial products are" (Hill et al., 2018, p. 115). However, art organizations "are encouraged to view themselves from the customer's perspective and put customer needs at the heart of their decision making" (Lee, 2005b, 294). So, there is an obvious need to solve the dilemma between artistic autonomy and the customers expectations and creating the balance between them.

The price of the art product is not proportional to its cost (Colbert & Ravanis, 2018) and it is complex to determine (Butler, 2000). Consumers expectations and artist reputation will influence the perception of the price. For example, the price of visiting museum like Louvre Abu Dhabi which is around 15EUR (Louvre Abu Dhabi, 2020) can be considered low or high, depending on the consumers' expectations and the artist reputation. The cost is the risk that consumer takes when he/she is consuming art product/service (Colbert, 2003, 36). These costs are (1) functional risk – linked to consumers perception of wasting money, time or being bored; (2) social risk – the risk of being seen in place that is incompatible with our perception of how others see us; (3) psychological risk - the risk of being in a place incompatible with our self-image; and (4) economic risk – the risk associated with the money and leisure time that are at stake. Also, the price will depend on the nature of the cultural product, more precisely the degree of intangibility. When the cultural product benefits are less

tangible, it will be more challenging to set a price (Hill et al., 2018). So, the pricing strategies need to have different consumer segments in mind and add value to the cultural experience (Colbert, 2003). Colbert and St-James (2014) call out for more research on pricing because the price has received little attention from marketing researchers in the arts.

The third element of the art marketing mix is promotion. Its importance for the art sector has been recognized early when Strang and Gutman (1980) stated that communication could attract the audience and enable success and financial survival of arts organizations. However, artists had some prejudice regarding promotion, considering promotion to be "below their honour" (Thomas & Cutler, 1994). Later, the promotion has become excepted as a useful strategy for promoting artists and their work. Today, the arts organizations use personal selling, direct marketing, advertising, sales promotion, public relations and social media (Colbert & Ravanas, 2018). Artist-entrepreneurs need to develop skills like networking, building and sustaining relationships and WOM for market survival (Fillis, 2010). In the arts, developing social networking capabilities is needed (Bridgstock, 2013). The promotion, for some types of cultural products, like movies, has received more attention from the researchers, while other types are still unexplored (Colbert & St-James, 2014)

Lastly, distribution (place) in the arts is determined by the form of consumers' consumption of the art product/service (Colbert & Ravanas, 2018). Intermediaries have an important role in distributing cultural products, such as artist agents, promoters, ticket agents or even third-party ticketing services (Hill et al., 2018). Because of the new technologies, some cultural products, like music, can be distributed through different channels. For example, attending the BRS Hyde Park concert (in UK) or streaming the music on Spotify. New technologies have completely changed the traditional perception of distribution in the arts (Smithson, 2019). There is an evident lack of research on the place variable and very few publications (Colbert & St-James, 2014).

Based on the proposed theoretical background and identified research gap in the marketing mix of cultural products, we posed one research question ***RQ: How artists-entrepreneurs perceive and manage marketing mix in arts and culture?***

3. Exploratory qualitative study of artist entrepreneur's opinions

3.1 Methodology

The exploratory qualitative research was conducted in order to reveal artists-entrepreneur's opinions. For investigating topics in entrepreneurial marketing, Fillis (2010, 92) recommends "qualitative perspective because can result in greater insight and facilitate the development of a closer relationship between the researcher and the researched". The in-depth interview method was used to gather artists-entrepreneur's opinions. The selected method was appropriate, because it was necessary to "encourage participants to talk about their own knowledge and experiences" (Roulston, 2017, 322).

The sample was an intentional expert sample of ten independent artists-entrepreneurs. The number of interviews was considered enough to achieve saturation and variability (Guest, Bunce, and Johnson, 2006). The sample included respondents, artists-entrepreneurs who are running their own art business. Although all respondents have a couple of years of experience in running their own business, none of the respondents had a business degree or any business education. Furthermore, artists who have logistical and financial support (like investors) were not included in the sample because we wanted to investigate self-employed and independent artist-entrepreneurs. Finally, the sample consisted of different artist-entrepreneurs working in various types of arts and culture. So, the sample included five musicians, two photographers, one architect, one illustrator and one wood art artist. Regarding the respondent gender, five

were female, and five were male respondents. Respondents' profiles, together with their codes, are presented in Table 1.

Table 1. Sample profile

Respondents' code	Gender	Occupation
ART01	Male	Wood art artist
ART02	Female	Musician
ART03	Male	Musician
ART04	Female	Architect
ART05	Female	Illustrator
ART06	Female	Photographer
ART07	Male	Musician
ART08	Male	Musician
ART09	Male	Musician
ART10	Female	Photographer

Note: Respondent answers are presented in codes to maintain their anonymity.

Source: Research

For the purpose of collecting data, a semi-structured interview guide was used. The semi-structured interview guide consisted of nine open-ended questions. The interview guide was divided into three parts. First, about marketing perceptions, second about perceptions of entrepreneurship in arts, and finally about marketing mix in the arts and its management. All respondents were interviewed face-to-face in their place of work or home. At the beginning of the interview, respondents were briefly introduced in the topic of research. Then nine-opened questions were posed, with the possibility to initiate other related topics. The interviews lasted on average, about 30 minutes. With the respondents' permission, all interviews were recorded and later transcribed for analysis (as recommended by Creswell, 2009).

3.2 Results

The analysis of the collected qualitative data has shown artist-entrepreneur's opinion and experiences in managing the marketing mix for the art product/service. The first theme was related to the marketing perceptions. Here, two open-ended questions were posed. On the first question "What is marketing for you", respondents have provided quite similar answers. They considered marketing to be equal to the promotion, which is not surprising finding. *"Marketing is something related to advertising, product advertising. The science that is dealing with something, I am not sure, but advertising..."* (ART01). Interestingly, one respondent pointed out how marketing and promotion on social media helped her to start and grow her own business (ART04). Similarly, *"From my perspective, it is a key to successful project presentation...."* (ATR 08). Regarding the second question, "Do artists need to have marketing knowledge?" almost all respondents agreed. However, two respondents pointed out how it depends on the artist wishes if he/she wants to be advertised. One respondent explains *"It's a personal matter, whether or not someone wishes advertise themselves. A friend of mine is a good example. He is an artist like me; he graduated from the same academy, doing the same thing I did. I had never heard of him in media, and you can't find him anywhere. Nevertheless, he is working."* (ART06) Furthermore, two respondents stressed the need for marketing knowledge for all professionals regardless of the business. (ART04, ART06)

Next theme was related to the perception and their experience as entrepreneurs. Also, two opened ended questions were posed. Respondents were asked, "Do you consider yourself an entrepreneur? Majority of respondents (8) consider themselves as an entrepreneur

(completely or partially). Only two don't think about themselves as entrepreneurs because they don't have a formal organization with departments. *"I didn't consider myself an entrepreneur until recently. When I opened my business and saw that I was now an accountant, that I needed to do marketing and to be seven positions in one..."* (ART06). Similar, one respondent points out *"Absolutely. Since I opened the LTD, I respect the system in which I live. I think I'm an entrepreneur too."* (ART05) Interestingly, other respondent stressed that he does not consider himself as an entrepreneur, but an entrepreneurial (ART03). On the question to describe their experiences as an artist-entrepreneur, respondents have provided quite similar answers. Majority of respondents identified three most challenging elements associated with entrepreneurship: 1) bureaucracy, 2) account management and 3) paying taxes. The struggle with these challenges presents a huge distinction in comparison to artists who are not self-employed and are a part of cultural organization. This difference is more obvious, especially in the beginning. One explains *"Because you have no idea of absolutely nothing. You don't know how the business works, your responsibilities and tasks. Additionally, when you add the artistic spectrum and when you need to find the person who wants to buy your art, it is difficult"*. (ART04) Similarly, another respondent explains *"In the beginning, you need to make compromises to achieve something. You have the same obligations as the entrepreneur in some other industry or business."* (ART05)

The next theme in the interview was related to the perception of the marketing mix elements and its management. Here, five open-ended questions were asked. Respondents were asked to describe their artworks. Then, they were asked, "Do they consider their artworks as products?". After explaining their artworks, respondents have agreed that it depends from artwork to artwork. Interestingly, one respondent explains *"If there are two of my artworks in someone's house, it will serve as a decoration... And if my artworks are leaning against each other in my studio, without a customer, then it has no value, it is not a product, then it is garbage. So, only when it becomes a product, then it has the proper function for which it was made"*. (ART01) One respondent connected the importance of determining the price for artwork with her product. *"It is a product that has some dimension, originality and individuality.... But definitely, if I put a price on it and if I sell it to you, it's a product"*. (ART05)

The next question was related to the process of determining the price of the artworks. Almost all respondents pointed out big differences in pricing because of their dynamic nature. Also, there is a slightly different view on the topic of pricing among respondents (who are musicians), where the pricing strategies are clearer. Interestingly, one respondent pointed out that in the beginning artist set low prices because of the fear *"you don't know better, you don't have any experience. When someone says to you "how do you charge so much, and you don't even have two years of experience behind you?" After you gain some experience, you get a little encouragement, and you raise prices."* (ART04) The price is also set according to investment into artworks (like materials, equipment etc.). Also, respondents pointed out that they set the price according to similar works by other artists, i.e. their competitors. Furthermore, one respondent explains *"An awful lot of parameter is taken here. Who do you work for; is it a big or small business? Whether it's print or just the web, the number of photos, the length of the shoot ... These are the main parameters. "* (ART 06) One respondent stressed that customer financing methods are also an important factor in determining the final price. *"Some clubs are financed by a city or government, and you can get a higher price for your performance there, than in some private clubs"*. (ART03)

On the question "How do you deliver you artworks to customers?" responses were similar. For example, artists who are musicians bring their equipment, prepare and perform live on an agreed location. Other artists usually use personal delivery, sometimes they use a snail mail, and if possible, buyers come to the artist studio.

The final question was dedicated to discovering, do artists promote their works, and how? Respondents agreed that word of mouth (WOM) and networking are the essential promotional activities in comparison to all other promotional activities. "*It has a lot to do with networking, how you are with people...*". (ART03) Some artist also pointed out the rising influence of social media, especially Instagram. Musicians pointed out public relations as the most important promotional tool. Artists "*need to know how to sell themselves on the market successfully... The focus is not only on the music and the arts but on the person*". (ART02)

At the end of the interview, few respondents initiated the topic of arts education in Croatia. Two respondents (ART05 and ART06) consider knowledge in the field of art marketing an essential part of an artist's professional growth. Also, one respondent (ART05) expressed regrets because of the lack of marketing education at the Academy of Fine Arts.

3.3 Discussion

The present study discovered artist-entrepreneurs' opinion and practices about managing the marketing mix of cultural products. Similar to previous studies in non-profit sector, marketing is mostly perceived as promotion, e.g. in museums (Komarac, Ozretić Došen and Škare, 2014) and national parks (Ozretić Došen, Malešević, Komarac and Škare, 2019). Although artists-entrepreneurs have a limited view of marketing, they have recognized its importance for their work. Daily, they are managing all the elements of the marketing mix for their cultural products/services.

Regarding their artworks as cultural products, artist-entrepreneurs expressed interesting views. They believe that when they sell their product to the customers, their artwork becomes a product. Contrary to the notion of art sacredness (Colbert & St-James, 2014) this is a somewhat unexpected finding. However, this finding is probably related to artist-entrepreneurs age and their experience, because they are taking care of every aspect of their business, not only concentrating on their artwork.

Also, the research has corroborated previous knowledge on the complex nature of pricing for cultural products (Butler, 2000). Price strategy for artist-entrepreneurs will depend on their costs or the competitors, but also some other factors, like customer characteristics. They pointed out artists experience as a crucial factor for determining the price. Less experienced artists will have lower prices because of the fear or a lack of marketing knowledge in terms of pricing strategies.

In the distribution channel between artist-entrepreneurs and customers, there are fewer intermediaries. For example, for musicians, intermediaries are only ticket agents. The common characteristics for all artist-entrepreneurs are that they do not have agents, because they represent themselves. The distribution itself depends on the nature of the product (the level of intangibility) and consequently on consumers' consumption of the art product/service itself, which is in line with the existing theory (Colbert & Ravanis, 2018).

Regarding promotion, the essential elements are personal networking, WOM and social media. This finding adds on the previous knowledge on the importance of networking (Morris et al., 2002) and WOM for entrepreneurs (Fillis, 2010) by discovering its importance for artist-entrepreneurs. Additionally, we found the raising popularity of social media among some artists (mostly Instagram) who see it as a good way of promoting visual arts.

The interesting finding is that some artists did not consider themselves as entrepreneurs before they started to manage all aspect of the art business. It is related to the lack of education in arts schools and the need for additional education in terms of business skills for artists. This finding goes in line with Bridgstocks' (2013) call for integrating entrepreneurship and other relevant business skills into arts education curriculum, which is lacking in many arts schools.

3.4 Limitations

The limitations are related to the type of sample, the expert sample from different fields of art and culture. The limitation can be related to the age of the respondents, as the sample included young artists (up to 35 years old). Additionally, the length of the interview can be considered as a limitation. Longer interviews would provide even more profound insight. Finally, the limitation is the researcher's subjectivity in the selection, analysis and interpretation of the data obtained throughout the interviews.

4. Conclusion

Entrepreneurial marketing is a concept that connects entrepreneurship and marketing. It is important for arts and culture where artists are oftentimes entrepreneurs, who they are running their art businesses without anyone's help. They face different challenges, such as lack in business competencies and time management.

The marketing mix in culture and art is specific and complex. The product, which, according to some authors, is outside the domain of marketing management still can be influenced in certain situations. Specifically, the artist-entrepreneur "manipulate product" – artwork in comparison to other cultural organizations or businesses. On the other hand, the price of a product is not proportional to cost, but is determined by different market factors, from competitors to customers. In terms of distribution, artist-entrepreneurs use traditional distribution channel. Regarding promotion, social media marketing is gaining popularity for artists promotion, besides networking and WOM.

Exploratory research on a sample of artists - entrepreneurs revealed that: artists perceive themselves as entrepreneurs. Artist-entrepreneurs believe that marketing is related to promotion, and mostly they consider their works as products. The pricing strategies different for the type of art, musicians, have more clearer pricing strategies, in comparison to other artists. The most effective promotional tool is networking, WOM, and some indicate the growing importance of social media. The distribution is still traditional and depends on the type of art, to the place of performance or personal delivery. So, it can be concluded that artist-entrepreneurs manage all the elements of the marketing mix, adapting it to the characterises of the cultural product/service. Finally, an interesting topic, the lack of arts marketing education emerged as a problem for artist-entrepreneurs who are trying to start and develop their art business on the market but lack the necessary knowledge and skills.

Further research should be directed toward exploring perceptions of different types of artist-entrepreneurs (e.g. only musicians) or even to explore perceptions of different types of artist such as film artist. Also, in future research, it would be interesting to discover customer perception of different cultural products "produced" by artists-entrepreneurs. Finally, additional research about arts education for artist-entrepreneurs is needed.

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Adaptive Choice-Based Conjoint Analysis of Marketing Master Student's Job Preferences

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Abstract:

This study focusing on the preferences of Hungarian Marketing MSc students on the job market while using CBCA conjoint analysis. An alternative preference technique is used at the first phase as the attributes are ordinal. Our results show that three different categories of attributes might be differentiated along their importance. Most important category is the net income. The second 'middle' category consists of 'distance from home', 'payment method' and 'employer type'. The third least important category consists of 'home office', 'working hours', 'extra programs' and 'training'. 'Payment method' receives the most significant influences. 'Gender', 'region of origin', 'academic influence' and 'type of permanent residence' has an impact on its importance. This attribute is the only not fixed feature in the middle important attribute set.

Keywords: *preference, conjoint, job choice*

1. Theoretical Framework

According to this paper's chosen theoretical framework, three types of approaches might be used for employers to attract applicants. The first approach concentrates on the recruitment process (timing, messages, places). The second is for inducements both in the financial and in the nonfinancial meaning. The third approach is focuses on the applicant pools (non-traditional applicants and less qualified applicant) (Rynes SL, 1990).

In our paper, we focus on the second approach and try to scale the importance of different financial and nonfinancial job preference attributes in the case of Marketing master students. Our study demonstrates job offers as a product that might be sold for students on the job market. Job attributes might be considered as product features, that are offered for the applicants (the clients) as they sign for a job (buy the product). The price charged for the job contract is the commitment for the employer and the skills used for fulfilling the requirements. This concept makes this topic accurate to use marketing phenomenon and methods such as the joint attribute evaluation tool the conjoint analysis (Yasmin, Mahmud, & Afrin, 2016).

2. Attributes for Conjoint Analysis in Literature

Conjoint analysis is used to explore the trade-offs between the different job characteristics. In the last decades of research the attractiveness and importance of career features were examined in different target groups (eg: agricultural students (Meyerding, 2018), MBA students (Montgomery, 2011)). In our literature review several studies were identified using conjoint analysis on job preference attributes. Although most of the papers were focusing on students at higher education none of them were focusing on Marketing students or fresh Marketing graduates. This study aims to measure the importance of different job preference attributes in the field of marketing. In this chapter those articles are reviewed which investigates with the conjoint method into the young generation in/or business fields.

Retail career attractiveness was examined among college students by the attributes of the industry type, starting salary, five-years-salary, training, benefits and work-life balance. According to the results five-years-salary is over preferences above all other attributes. (Oh, Weitz, & Lim, 2016). Generation Y job preferences for French students were discussed along several binary characteristics such as type of contract, atmosphere, distance, career path, salary, type of work, hours, reputation, status and bonuses. It seems that type of contract and atmosphere at work highly more important for the Y generation than the other characteristics (Guillot-Soulez & Soulez, 2014). MBA graduates job searches were evaluated along with 14 attributes: intellectual challenge, geographic area, financial package, ethical reputation, caring about employees, people in the organization, learning on the job, type of position, advancement, dynamics & culture, business travel, environmental sustainability, community/stakeholder relations, economic sustainability. For this group the intellectual challenge is evaluated the highest importance, while economic sustainability was scored the least important (Montgomery, 2011). Start-ups are in the focus of workplace attractiveness. Recent conjoint study discovered nine attributes of attractiveness in the start-up sector along paired choice alternatives, such as flexibility of working schedule, hierarchy, team climate, company shares, responsibility / empowerment, task variety, leadership functions, learning curve, entrepreneurial knowledge building. The most important characteristic seems to be the team climate, but it must be noted that financial attributes were not covered in this study (Tumasjan, Strobel, & Welpe, 2011).

3. Conjoint – the Applied Method

The conjoint method dates back to 1970th. This methodology for modelling multiple-preference of customers originates in mathematical psychology and psychometrics. The aim of the conjoint is to forecast the customers' choice on different product profiles along several product attributes while estimating the importance of the attributes and the utility of their levels. Two main approaches have emerged in conjoint modelling. The first approach uses 'two-factor-at-a-time' in data collection while the second approach uses 'full-profiles' for evaluations. The 'full-profile' approach provides more realistic situations for the respondents as they need to judge certain profiles along with several attributes. As the stimuli are closer to real situations the results of the modelling are expected to be closer to reality (Green & Srinivasan, 1978).

Choice-Based Conjoint Analysis (CBCA) is the second generation of the conjoint analysis methods since the traditional conjoint analysis (TCA) was criticized for not judging the real customer choices just concentrating on the chosen preferences (Backhaus, Wilken, & Hillig, 2007). The CBCA is actually not a unique technique but more like an umbrella for several hybrid methods those are most widely used in market research cases (Agarwal, DeSarbo, Malhotra, & Rao, 2015).

The chosen method of this study is Adaptive Choice-Based Conjoint (ACBC) which is an alternative against a few problems experienced in CBCA. Namely, one point is that the profiles are shown for the respondents sometimes far from the ideal or realistic options that might be considered by the unique participant. One other point if the respondent evaluates one attributes very high and only one level is shown among the options than he or she chose easily that only one option without evaluating other profiles. ACBC consists of 3+1 different phases to build the model for preferences. In the so-called 'Build Your Own' (BYO) first phase the individual preference levels for each attribute are configured in a task where the respondent must create an ideal product along the attributes. Based on their choices several profiles are created for further evaluation. In our research this phase is modified thus ordinal scales are used as attributes. The second phase is the 'screening' phase where the respondents need to decide whether they would like to pick each profile or not. The final choice is not forced here, every profile might be accepted or refused. In this phase, the 'none' parameter threshold is estimated. The 'choice tasks section' is the third phase where the surviving profiles (those were chosen in the second phase) are grouped three per screen including attributes those are the same in all three concepts on the screen so the respondents need to focus only on the different features and choose only one concept. The winning concepts compete in a next round until the winner concept is identified. These three phases lead to a good trade-off database for modelling part-worth utilities. The +1 optional phase is called 'calibration section' where the respondent needs to evaluate the concept created in BYO phase and the winner of the previous phase, plus 4 accepted and rejected concepts. These concepts must be evaluated on a 5 points scale how likely he or she would by the given profile. This section is used to estimate the part-worth threshold for 'none' (Sawtooth Software, Inc, 2014).

4. Sample Description and Data Collection

The research was conducted in a Hungarian business school under the framework of the obligatory course of 'Marketing research and market analysis' for Marketing MSc students.

The questionnaire was online distributed among students in their 1st semester. The data were collected during four semesters: in the spring semester of 2017/2018, both semesters of 2018/2019 academic year and the autumn semester of 2019/2020.

They have been offered course 3 points for the filling in as an extra above the total 100 points of course. Thanks to the extra motivational points, 79-86% of the students have participated in the survey every semester. 273 students filled in, 24,9% of the respondents were male and 75,1% female. The average age in the sample was 24,20 years with 2,26 years standard deviation.

5. The Questionnaire Design

Eight attributes were chosen for this study. Seven are originated from the literature review as they have emerged in more studies. 'Distance from home' and its levels were align to the size of Budapest. 'Net income EUR/month' and its five levels were categorized along EU statistics (EUROSTAT, 2011). In case of 'working hours', 'home office' opportunities, 'training' and 'extra programs' we used a 3-level ordinal scale to see utilities more detailed. 'Employer' type levels are from the three typical sector broadened by start-ups as a fast developing employer type also observed in literature ((Tumasjan et al., 2011). This is the only attribute where the scale in nominal and no ordinal nature is present. The eighth attribute covers the fraudulent contracting and legal / illegal payment methods for employers since this phenomenon is present in the Hungarian labour market (Pedersini, Pallini, & European Foundation for the Improvement of Living and Working Conditions, 2016). See details of attributes and levels in Table 1.

We choose the ACBC approach due to the fact that applying for a job is a complex decision, as it was discovered in the literature review applicants take many aspects into account when making a decision. During an interview when the conjoint approach is applied respondents are forced to make a sequence of (slightly unrealistic) fast decisions and ACBC helps us to eliminate the less relevant levels and alternatives from the choice tasks, in other words, it makes the decision making easier and more realistic for the respondents, which is clearly beneficial when it comes to a complex product category. And last but not least less „noise” during an interviews means a more accurate measure.

The basic logic of the interview flow followed the ACBC approach outlined in the previous chapter. Nevertheless, it is important to note that 7 out of the 8 attributes involved in this survey have an ordinal measurement level, thus, the „classic” BYO part of the ACBC approach was not applicable in our questionnaire. In the case of an ordinal scale, the most appealing level does not depend on the preferences of a unique respondent but obvious. The only exception in our case was the type of employer dimension where a single choice question (in line with the traditional ACBC approach) was used.

In the first phase in order to find a relevant set of starting points for the second step of the ACBC interview even in the cases of the ordinal attributes, we identified the levels being „already acceptable” instead of the obvious ideal ones. We showed the levels of ordinal attributes one after another (starting with the least attractive one) up to the point when our respondent claimed that the actual level of the attribute was acceptable as a part of a job offer on her / his side. Each question concentrates on one attribute and one level, such as: 'Are you willing to accept a job in case 90 minutes of travel is needed in one direction?' (The next to question focuses on 60, 45 and 30 minutes). Maximum 24 questions (number of every level, but only until the accepted level) concentrates on to cover the unique preference level of the students for the attributes.

Being aware of a set of relevant levels the interviews were carried on with the traditional steps of an ACBC methodology

In the second phase, the selection of the consideration set, each job offers should have been evaluated if the respondent would accept the offer or not. The stimuli were presented via verbal (written) presentation (Green & Srinivasan, 1978) where each conjoint card was shown

one digital screen for the respondents. Each screen has introduced 3 different job offers based on the respondents' answers in the first phase. Altogether 10 screens must have been evaluated which means 30 nonredundant job offers. On each screen, four of the attributes were on the same level (based on the individuals' first phase choices), and four were different. It must be noted that the choice is multiple choice so the respondent can take even all three job offers if he or she likes.

In the third phase, the tournament section aiming to identify the rank order of the offers selected into the consideration set, each job offer that was chosen by the respondents was offered again randomly in 2-3 offers / screen, to see their preferences among the chosen packages.

6. The Results

The typical output for conjoint analysis is a table that includes the relative importance in percentages compared to the whole set of attributes for each individual object attributes. Part-worth utilities are also calculated to estimate the preference for each level under one individual attribute (Green & Srinivasan, 1978). The following table demonstrates these results in our study.

Attributes might be scaled along with three categories. The first category consists of only one attribute 'Net income', as it is highly more important than the others. The importance of this attribute is more than double than the next attribute 'Distance from home'. The second category consists of three attributes those are middle important for the respondents such as 'distance from home' and 'payment method' and 'employer'. The third category is the least important category built up by 'home office' and 'working hours' and 'extra programs' and 'training' attributes. It seems that these characteristics are less matter of choice for Marketing master students.

TABLE 1: Importance and utilities

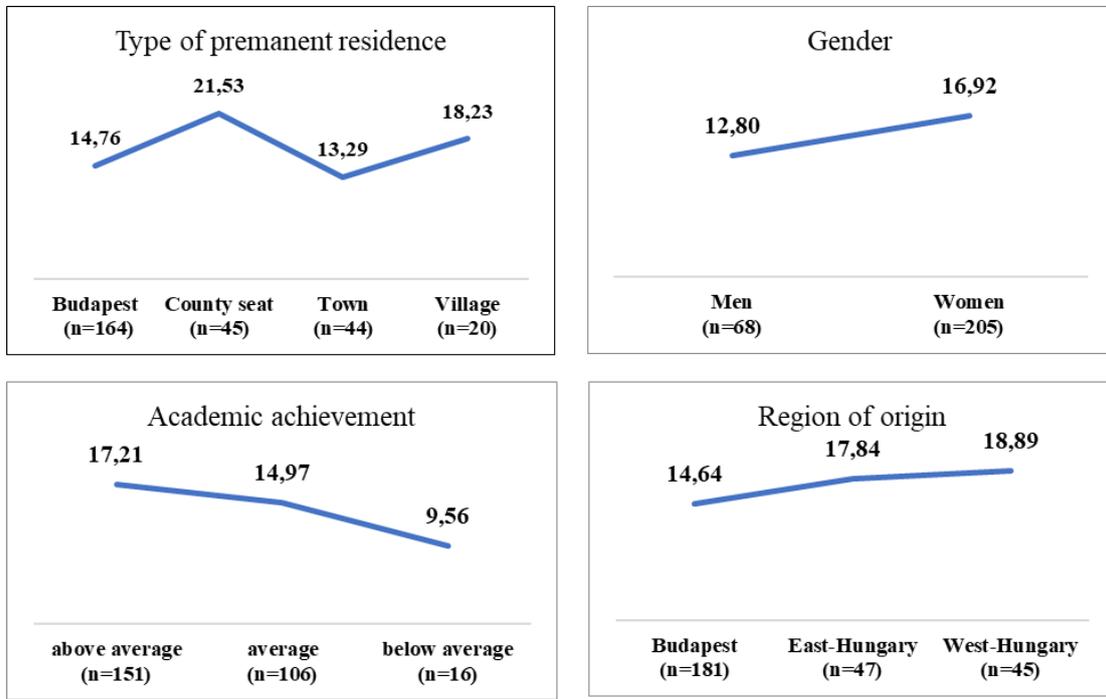
	ATTRIBUTES	IMPORTANCE		LEVELS	UTILITIES	
		Mean %	Std. Dev		Mean	Std. Dev
HIGH	Net income, EUR/month (the HUF amount exchanged)	39,46	11,06	516	-185,87	52,95
				581	-49,56	34,03
				645	36,38	24,37
				710	69,26	31,20
				774	129,79	43,89
MIDDLE	Distance from home (min)	16,52	5,83	90	-89,28	34,58
				60	6,75	20,41
				45	39,63	14,49
				30	42,90	14,10
LOW	Payment method	15,89	11,26	not contracted, must be self-employed or pocket payment	-58,58	44,06
				partially contracted, partially must be self-employed or pocket payment	-9,97	25,01
				totally legal, contracted	68,55	49,31
				Employer type	12,28	5,24
multinational company	4,18	23,02				
Hungarian owned company	21,75	24,22				
start-up	26,41	22,01				
MIDDLE	Home office	5,79	4,76	not allowed	-21,33	17,34
				on special occasion it is allowed	-3,67	10,02
				anytime allowed	25,00	21,76
LOW	Working hours	4,06	3,83	fixed	-15,74	16,23
				core time with flexible open and close	-1,03	8,17
				completely flexible	16,77	15,48
MIDDLE	Extra programs	3,01	2,84	not available	-8,06	7,59
				available but self-financed	-8,00	7,56
				available for free	16,05	15,14
LOW	Training	2,98	2,35	not available	-13,08	11,35
				occasionally	2,29	5,66
				designed training programs	10,80	8,00

Importance were ANOVA tested for 'gender' (male / female) 'age' (max 23, 24, above 24) 'type of permanent residence' (Budapest / county seat / town / village), 'academic achievement' (below average / average / above average) and 'region of origin' (West-Hungary / Budapest / East-Hungary). Age has shown no significant difference in case any of the attributes.

Payment method seems to be the most sensitive in case of importance. 'Type of permanent residence' (Levene $p=0.914$, $F p=0.001$) shows a significant effect. Payment method is the most important for those who arrived from county seats (21.53) and less important for those who originate from towns (13.29). The 'payment method' has affected by gender as well (Levene $p=0.897$, $F p=0.009$), since is more important for women (16.92) than for men (12.80). 'Academic achievement' also influences the importance of 'payment method' (Levene $p=0.139$, $F p=0.020$). The better results the students have the more they evaluate this attribute, above average mean importance is 17.21, for average students 14.97

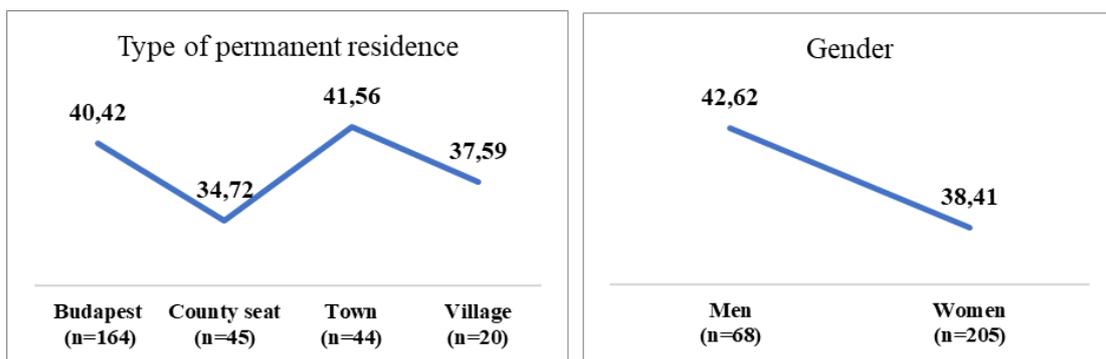
and those who are below average it is 9.56. The last variable that influences this attribute is 'region of origin' (Levene $p=0.588$, $F p=0.032$). Budapest originated students are the least sensitive for 'Payment method' (14.64) while East-Hungary (17.84) and West-Hungary (18.89) originated students are more focusing on this attribute.

FIGURE 1: Significant effect on 'Payment method' attribute (mean importance)



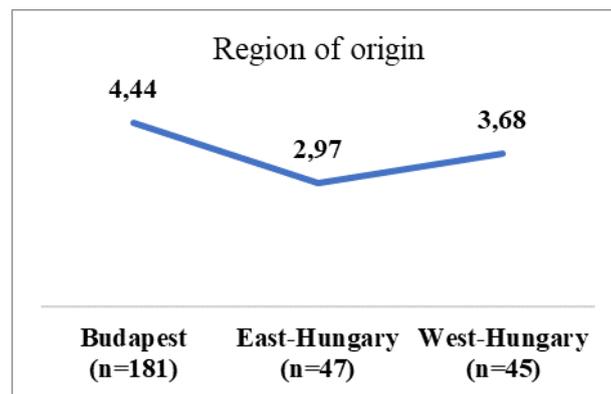
'Net income' is influenced by two variables. One is the 'type of permanent residence' (Levene $p=0.127$, $F p=0.008$). The most important for those who is permanently seated in towns (41.56) and less important for those who have permanent address in county seats (34.72). Gender has a significant impact on the importance of net income (Levene $p=0.110$, $F p=0.006$). Men prefer net income more (42.62) than women (38.41).

FIGURE 2: Significant effect on 'Net income' attribute (mean importance)



'Working hours' has only one influential variable, the 'region of origin' (Levene $p=0.058$, $F p=0.048$). This characteristic is the most relevant for those who was born and raised in Budapest (4.44) and the less important for East-Hungarian originated students (2.97).

FIGURE 3: Significant effect on 'Working hours' attribute (mean importance)



7. Limitations and Conclusion

The importance of job attributes differ for each target groups as it appears in the literature. This paper takes into account one target group in one country and university. The attributes might be segmented into three groups from most important to least important. Wages alone dominates the preference of university students thus it was not evident by literature review. The middle important features are 'distance from home', 'payment method' and 'employer type'. From these three only one characteristics might be developed by employers in a short-term 'payment method' - the other two attributes are rather fix in short-term. The most sensitive attribute seems to be this 'payment method' as 'gender', 'region of origin', 'type of permanent residence' and 'academic achievement' influences it's value for the students. The least important are those features which can be developed by the employer in a shorter-term as they are the most flexible such as 'training', 'working hours', 'home office' and 'extra programs'.

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Using controversial values in CSR communication – analysing the Coca-Cola #loveislove campaign

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Abstract:

Nowadays we can witness a radical change in CSR communication: Brands are much more willing to take on controversial roles besides traditional, positive social values (like environmental protection, fight against poverty, etc.). Our study analysis this new CSR communication phenomenon through the assessment of Coca-Cola's #loveislove campaign that took a stand for homosexual relationship. The campaign took place in Hungary in August 2019. Netnographic research was conducted among the Hungarian followers of the Coca-Cola's official Facebook page. Posts, reactions and comments were analysed. Studying the comments, we observed a rather negative response, however the simple emoji reactions were dominantly positive, and the positive comments also received more likes than the negative ones. We can assume that controversial CSR results in really high publicity and also motivates large number of supporters, however it can backfire to the brand image also.

Keywords: *CSR communication, Coca-Cola, #loveislove*

1. Introduction

CSR was traditionally about the firm committing to the ideas of sustainability and using it in its communication and PR activities. However, this practice has changed today: now not only the generally accepted “good boy” elements (environmental protection, fight against poverty, etc.) are involved in corporate communication, but global brands also express much more controversial social values (e.g. the rights of Afro-Americans; extreme masculinity). Moreover, they make a statement in current political issues (e.g. Facebook and AirBnB stand for immigration). It seems that traditional CSR communication was discredited by greenwashing. While new CSR communication is not afraid of standing up for controversial social values and causing a scandal, even turning loyal consumers against the brand, while making earlier passive consumers into enthusiastic fans.

It is practical to differentiate corporate CSR activities from corporate CSR communication. While the former is essentially a question of management and often of logistics, whose aim is actually to be active in a socially responsible way, the latter – CSR communication – is explicitly a marketing task, a special way of corporate image building towards consumers and PR activities.

Corporate social responsibility, i.e. CSR in general terms is actually a state or corporate instrument which helps organisations to achieve their goals while considering and supporting social objectives (as well) (Jones, 1995). However, research shows that regarding social responsibility the most active companies are the ones which are also the most attacked, while those who do almost nothing hardly ever receive negative criticism (Morsing, Schultz, and Nielsen, 2008).

Companies nevertheless need to be careful what and how they communicate, as it has been proven that these messages can often generate a negative response in the case of certain groups, which can also have a negative effect on the assessment of the company (Morsing & Schultz, 2006). Furthermore, stakeholders’ expectations continuously change, thus CSR communication needs to be dynamic to adapt them (Morsing & Schultz, 2006). This objective can be to achieve a better financial result and increase social welfare simultaneously (Porter & Kramer, 2006), develop a better reputation about the company through social engagement (Mutch & Aitken, 2009), or combating poverty, unemployment and the lack of education by taking use of corporate influence (Crane, Matten, and Moon, 2008). According to Schultz et al. (2013) we can look at it as an instrument which can help companies to achieve their goals, or as a political norm which conveys the ethical social or even political statement of the company. It is very important how and to whom the company communicates. Seele and Lock (2014)

differentiate 4 groups of CSR communication depending on 2 dimensions, whether the communication is internal or external and whether it is published or non-published. Furthermore, consistency and transparency are essential for effective CSR communication because these factors contribute to developing trust in stakeholders towards the company and making messages credible (Kim & Fergusson, 2018).

Nevertheless, it also needs to be considered that CSR communication carried out for the sole purpose of publicity has a negative effect on consumer trust, thus on the company's reputation (Kim, 2019). It is supported by Kim and Ferguson's (2014) research, in which they found that people are more interested in who is benefiting and how from the company's CSR activities than in other information (e.g. official declaration, spokesperson's statement).

2. Novel Responsibility of Brands

It is no longer sufficient for companies to talk about merely the technical parameters of their product or service, they also need to express themselves clearly and authentically about the system of values they pursue, thereby the system of values their brand represents. The attribute of "high-quality" was eroded in the era of mass production and necessitated a more sophisticated positioning of brands, and there is also a similar phenomenon in the area of CSR communication. It is no longer enough to communicate for the consumer that the company behaves responsibly and pays attention to social and environmental aspects. It has become a basic requirement. The distinctive element may be what specific system of values a particular company advocates, and thus what values it necessarily objects to. The key objective of the paper is to present how this new, special approach has appeared in CSR communication, which, instead of the generally accepted, positive, "good boy" values (environmental protection, charity, etc.) puts forward values considered controversial within society. As a result, CSR communication brings about not only supportive but also opposing responses and groups in the environment of the brand.

3. Presenting the Background and Methodology of Own Research

The key question of our research is what reaction it provokes among the followers of a brand within social media if a big brand conducts controversial CSR communication, i.e. making a stand for a value which is not evident for the entire society. The research was inspired by a CSR campaign in Hungary. In August 2019, Coca-Cola launched its "#loveislove" campaign, whose slogan "Zero Sugar, Zero Prejudice" clearly advocates love and relationship between homosexuals and every other gender identity. The campaign was timed in this period because the largest domestic festival, the Sziget Festival was organised in the same period, whose theme in 2019 was "Love Revolution", which emphasised the same

values as the Coke campaign. The first reactions were controversial as for example the MP of the governing party called on people for an open boycott in his social media profile and asked them not to drink Coca-Cola until the posters featuring homosexual couples disappeared from the streets. The indignant consumers started petitions to this end. Therefore, the posters featuring homosexual couples were replaced by posters about the product, but its rainbow-coloured label and background remained (as a symbol of diversity) (Vaskor, 2019). Although it was not the first such campaign of Coca-Cola globally, as it has stood by the LMBTQ community, the Pride, and homosexual marriage several times in other countries, in Hungary it was their first such movement. The campaign has received a great deal of attention in the online space, several articles and social media posts have discussed the topic not only nationally but also abroad.

In the research, we examined the posts related to #loveislove campaign featured on Coca-Cola's official Facebook page, as well as the reactions and comments on them with the methodology of netnography. In this connection, the comments and reactions under the posts were analysed from both qualitative and quantitative perspectives. In certain cases, we compared them to posts published prior to the campaign.

In the course of our research, we examined only the followers of the page who we assumed to follow Coca-Cola's social media page because they support or have supported the brand up until this point.

4. The Results of the Netnography Research

In the campaign period, Coca-Cola published on its page in total five Facebook posts which promoted a sexual relationship and love between any genders and ran under the slogan #loveislove. Each of these five posts was published between 4th and 9th August 2019 on Facebook. Apart from these posts, the company already published a post under #loveislove on 6th July 2019, on the day of the Budapest Pride, in which it indicated for the consumer that it advocates diversity.

We examined if the posts containing a controversial message generate more or less reactions among the followers of the page compared to other general posts. For its examination we compared the 5 posts published in the campaign plus the posts on 6th July to general posts. In the case of the latter, we considered all the posts not about #loveislove published between 1st May and 4th August. They were mostly about cap-code prize-winning games related to the festival season, barbeque season and new products (vanilla flavoured Cola and Cola energy drink). The results of the analysis are included in Table 1.

Post	Interaction	Indicator		
		mean	median	std. deviation
General posts	reaction	283,4	159	362,4
	comment	54,5	17	80,7
	share	17,2	7	45,7
#loveislove campaign posts	reaction	212,2	157	193,6
	comment	42,9	16	62,3
	share	9,2	6	9,3
General posts	reaction	7822,7	4150	7211,4
	comment	1378,0	897,5	1156,0
	share	594,5	62	998,7
##loveislove campaign posts in august	reaction	9280,0	4200	7047,1
	comment	1637,6	998	1095,0
	share	708,0	83	1058,1

Table 1 The characteristics of the reactions, comments and shares on the posts on the Coca-Cola's Facebook page

To understand the table, it is important to clarify that the indexes were calculated twice (mean, median, and standard deviation) in the case of both the general posts and the campaign posts. It was needed because in the case of general posts there were two posts which triggered much greater interest than the other general posts, thus biased the index values. One of the posts was about environmental protection, while the other was related to the launch of the new, vanilla flavoured coke. The former got 1800 reactions and 292 shares, while the latter got 1400 reactions and 354 comments. In the case of the #loveislove campaign, we calculated the indexes in more than one way because the post of 6th July which was published at the time of the Budapest Pride with #loveislove caption was out of the period of the August campaign, and it also generated much less activity, thus it biased the index values.

The indexes of the #loveislove campaign posts show a much higher value in each case meaning that these posts triggered much higher activity among the followers of the page compared to the posts with a general message.

We also calculated the reactions (likes) to these posts. Reactions here refer to the number of likes to a post, which we call reaction because users can now choose from 6 options when they like something. Based on this, users can react with a simple like, heart, laughing face, surprised face, crying face and angry face to a post. The table clearly shows that examining the average number of reactions (even if we consider the higher average for the general posts and the lower average for the campaign), on average 27.5 times more reactions were given to the campaign posts. I.e. this is the smallest difference between the

average numbers of reactions examining the two groups of posts. Among the campaign posts, the Coca-Cola's profile picture on 7th August, featuring a Cola with a rainbow-coloured label, got the most reactions, 21900 pc in total. Of the campaign posts in August, even the one with the lowest number of reactions got 4100 pc. On the other hand, for general posts the highest number of reactions was 1800 pc. It all clearly proves that the campaign posts in fact generated more reactions among followers.

We can examine the number of comments on the posts in the same way. The table indicates that the average number of comments on campaign posts, considering the smallest difference, is 25.3 times the average number of comments on general posts. We have also examined if controversial posts are better than more general posts in terms of publicity. While general posts are shared on average 6-7 times, for #loveislove posts the number of shares is on average 62 and 83 respectively (depending on which calculation we consider). It means a difference of minimum 34.5 times. *We can conclude that posts with a controversial message generate more activity and higher publicity among the followers of the page than other posts with a more general message.*

In the next step we took a more in-depth investigation by analysing whether the reactions on the campaign posts were positive or negative. In the research, we considered the simple like and heart to be a positive reaction, the sad and angry face to be a negative reaction, while the surprised and laughing face to be a neutral reaction as in their cases it cannot be clearly defined if the user has a positive or negative attitude toward the content. Based on this, we determined the proportion of each categories (positive, negative, neutral) and we calculated an average (Table 2). We found that on average 81.1 per cent of the reactions on the posts were positive, 16.5 per cent were negative, while 2.4 per cent were neutral. If we consider only heart reactions (and not likes) to be positive, their number is still higher in the case of each post compared to the total of angry and crying reactions.

Date of share	Positive	Negative	Neutral
06/07/2019	89,9	9,7	0,4
04/08/2019	82,5	15,7	1,8
07/08/2019	80,5	15,0	4,5
07/08/2019	76,6	20,5	2,8
07/08/2019	78,7	19,4	1,8
09/08/2019	78,4	18,8	2,8
Mean	81,1	16,5	2,3

Table 2 Distribution of comments on the posts of #loveislove campaign based on attitude, %

In the next step we took a more qualitative approach by analysing the expressed positive or negative attitude of the comments on the first post of the campaign period. We chose it because it was the first post during the campaign, and it contained the photos featuring homosexual couples, thereby causing deeper indignation within society. The number of comments on the posts and the response comments was in total 3200 pc, out of which the number of primary comments was in total 1241 pc. We analysed the 500 most relevant ones because it was the amount Facebook allowed to display. Out of 500 examined comments, 315 comments could be specifically categorised based on its positive or negative tone. The remaining 185 comments contained irrelevant contribution in terms of the campaign, occasionally tagging a friend under the post, or it was impossible to decide if it has a positive or negative tone due to irony, thus we ignored them in the analysis. The examination revealed that 64.4 per cent of the 315 comments were negative, while only 35.6 per cent were positive.

Nevertheless, it could be worth examining whether these comments were formulated about the represented cause (homosexuality) of about the brand or possibly both. We found that most of the negative comments were evidently against the brand and not specifically against the values formulated in the message. 47.3 per cent of the 203 negative comments contained specific content about rejecting and boycotting the brand, 30 per cent could not identify with the communicated values, while 22.7 per cent included disagreement with both the brand and the values. It shows that 70 per cent of the comments contained an attitude against the brand, while 52.7 per cent against the system of values. Many comments included the boycott of Coca-Cola and that they would rather consume the product of the rival brand, Pepsi from then on. We can conclude that the negative comments were directed against Coca-Cola as a brand, rather than against the represented cause.

On the contrary, in examining positive comments we found that 58 per cent agreed specifically with the communicated values and message, 15.2 per cent explicitly advocated the brand, while the remaining 26.8 per cent mentioned both in the comment. It shows that 84.8 per cent of the positive comments included the represented cause, while only 42 per cent included the support of the brand. It clearly suggests that in the case of positive comments the followers of the brand agree with the message communicated by the brand, rather than support the brand.

Furthermore, we examined the amount of reactions generated by positive and negative comments from the other followers of the page and how many response comments were given. We examined this first by defining the positive or negative tone of a comment and then looking at the number of reactions and response comments on it, and finally adding up their

numbers in the case of both negative and positive comments. The results are summarised by Table 3.

Type of the comments	Number of reactions, pc	Average number of reactions, pc	Number of comments, pc	Average number of comments, pc
Positive	6822	60,9	591	5,3
Negative	3881	19,1	379	1,9
Total	10703	34,0	970	3,1

Table 3 Number of reactions and response comments made on the comments based on the type of the comment

Regarding the number of reactions, we found that positive comments overall received much more reactions than the negative ones. In many cases, a positive comment got hundreds of reactions from other followers. Examining the reactions qualitatively, it can be generally established that at least 80 per cent of them were positive in each case, i.e. the supporters of the comment were more likely to give a reaction. The number of reactions on the negative comments is overall lower than on the positive ones. In addition, it should be noted that the *"I feel I'd rather have Pepsi..."* comment generated 1900 reactions from other users, which is almost half of the negative reactions. This comment received the most reactions out of all the examined comments. It all indicates that the positive comments generated more reactions and, furthermore, if we look at the number of reactions per positive and negative comments respectively, we find that the average number of reactions on positive comments is more than three times higher than on the negative comments.

5. Conclusions

Our paper aimed to highlight a very interesting current phenomenon, which transforms CSR communication. Traditionally, this activity was communication serving PR purposes and providing an attractive and likeable image of the company (or brand), in which the main objective was to protect the environment and solve social problems. Then the credibility damaged by green washing and audience disinterested in one-dimensional messages due to unified, large-scale CSR communication have made this field of marketing start to find new ways in the past years. We can see the first signs of this process when well-known brands of global companies venture into a so-far almost unfamiliar communication area and formulate messages reflecting a profound system of values, far from being conventional.

We found that the posts of the controversial campaign generated a much higher level of activity among the Coca-Cola followers in the social media. Examining the reactions, the comments and the shares, the level of activity for a campaign post was multiple compared to general posts. Consequently, we found a higher degree of activity, interaction and publicity.

We established that the reactions on #loveislove posts are predominantly positive, representing eighty per cent or a higher proportion within likes. However, nearly two thirds of the analysed comments had a negative tone, i.e. in this respect the campaign generated predominantly negative responses from the followers. It should also be noted that both the positive and the negative comments received supportive reactions, but in a much higher number for the comments having a positive tone. It indicates that although it is true that the negative comments are predominant, the positive ones got much more support, so it is possible that those who have a positive attitude toward Coca-Cola and the message it communicates are less willing to write a further comment and more likely to support the earlier contributions with reactions (likes). It also should be emphasised that most of the negative comments disparaged the brand, and not the social value. While the positive comments mostly supported the social cause and not the brand itself.

We can conclude that controversial communication generates a very wide but low-key (limited only to reactions – likes) positive response among the supporters of the represented cause. At the same time, it encourages the opponents of the represented cause to formulate a loud counter-opinion (manifested in comments). Based on this, we cannot make a clear decision about whether the campaign had an overall positive or negative effect on the brand and its sales. It remains questionable whether expressing controversial opinions actually means that companies now establish and openly advocate an authentic credo, or they emphasise a profound value simply for business purposes, considering it merely for its marketing communication potential.

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Price fairness, consumer involvement, emotional and behavioural responses: how do goods and services compare?

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Abstract:

Present study investigates how product type – good/service, affects the relationship between price fairness, emotions and behaviour. It also introduces consumer involvement as a possible determinant in perceptions of price fairness. All relationships were hypothesised and empirically investigated. Results suggest that consumer involvement has no significant effect on price fairness, with the exception of consumer purchase involvement in the physical good scenario. Relationship between price fairness and emotional responses is confirmed and discussed for both types of products. Largest differences between two product types appear in behavioural responses to perceived price fairness. Important theoretical and managerial implications are also discussed.

Keywords: *price fairness, services, consumer involvement*

1. Introduction

In a service-oriented world, price presents a particularly interesting challenge. While pricing approaches and objectives may be similar to pricing of goods, service prices are nevertheless characterised by several meaningful differences (Hoffman, Turley, & Kelley, 2002) ranging from particular demand, cost, customer, competitive, profit, product and legal considerations. Due to service characteristics, consumers often find service pricing difficult to understand, mainly because of intangibility and variability of services. Consequently, consumers can perceive prices as risky or even unfair. The nature of services pricing, price variability, growing consumer awareness of price movements and fierce competition in service markets provide distinct opportunities for researchers and practitioners alike. One area of intrigue is related to the perceptions of service price fairness, its' antecedents and consequences.

Price fairness perceptions are a widely accepted construct that relates to several cornerstones of consumer behaviour research: satisfaction (Bei & Chiao, 2001), buying intentions (Bolton, Warlop, & Alba, 2003; Campbell, 1999; Iyer, Grewal, & Rothenberger, 2017), consumer loyalty (Bei & Chiao, 2001; Konuk, 2019) and others. However, the majority of past research focused on studying fairness in the context of tangible products, such as: clothing (Bolton et al., 2010), groceries (Kahneman, Knetsch, & Thaler, 1986), consumer electronics (Ferguson, Ellen & Bearden, 2014), and cars (Herrmann, Xia, Monroe, & Huber, 2007). There are some important exceptions (e.g. tourism, travel, hospitality services) to this observation in the field of services, which provide useful building blocks in theory development and some will be included in literature review part of this paper.

Main contributions to the broader field of price fairness studies are the inclusion of consumer involvement and the unique investigation of how the type of product (good or service) moderates price fairness perceptions and related emotional and behavioural responses. This type of comparative approach is extremely rare in price fairness research, although it can provide important benefits to this field. Findings of our study can help managers in developing sound pricing strategies and provide guidelines for customer relations practices that take consumers views on fair prices into an account.

2. Conceptual framework and hypotheses

General approach to defining price fairness originates from Xia, Monroe, and Cox (2004) who defined price fairness as a consumer's assessment and associated emotions of whether the difference (or lack there off) between a seller's price and the price of a comparative other party is reasonable, acceptable, or justifiable. Previous research has investigated price fairness in relation to several different types of products. Consequently, the comparability of price fairness's impact on consumer behaviour may be difficult to grasp. One possible avenue of providing an insight into how price fairness perceptions compare across different types of goods and services may be via consumer involvement. Consumer involvement is a well-established concept and it can be defined as an individual's assessment of product relevancy (or relevancy of other marketing stimuli) (Mittal, 1995). Past research was able to link consumer involvement to product selection and purchase decisions (Mittal, 1989; Smith & Carsky, 1996). Some authors also indicate that consumers with higher involvement are more price conscious (Arora, 1995) and show higher price sensitivity (Dominique-Ferreira, Vasconcelos, & Proença, 2016). However, only a handful of studies explored the role of consumer involvement in fairness research. High-involvement customers appear to have higher expectations that service providers treat them fairly (Varki & Wong, 2003) and Mattson (2014) showed a small, negative effect of consumer involvement on perceived price

fairness, albeit in a particularly specific scenario. Our aim is to explore this idea further, with our first hypothesis:

H1: Consumer involvement influences perceived price fairness.

One important notion of contemporary characterizations of price fairness is that emotions are an integral part of such appraisals. Emotional responses to perceived price fairness include (Xia et al., 2004): sadness, disappointment and regret. These are usually associated with lower emotional arousal and reactivity, and can be termed as passive responses. Differently, hate, contempt and rage, are characterised by higher emotional arousal and thus viewed as active emotional responses. Past research, however limited, reveals that emotions (1) affect the assessment of price fairness (Campbell, 2007; Heussler, Huber, Meyer, & Vollhardt, 2009) and (2) appear as a direct response to perceived price fairness which later mediates the behavioural responses (Xia et al., 2004). Our focus is on their motivational role therefore our second hypothesis states, that:

H2: Price fairness perceptions influence emotional responses.

The main appeal for price fairness studies comes from its impact on consumer behaviour. Price fairness perceptions affect many different facets of consumer behaviour, which researchers classified into three broader categories (Xia et al., 2004): no action, self-protection and revenge. First group relates to passive behavioural responses that require less or no effort at all, while the second and third group include behaviours that demand a more active approach from consumers. The motivations behind these reactions stem primarily from consumers financial self-protection, and financial compensation. Additionally, we can view them also as coping mechanisms through which consumers deal with negative emotions experienced in price (un)fairness situations (Wetzer, Zeelenberg, & Pieters, 2007), which also highlights the relationship between emotional responses and behaviour (Laros & Steenkamp, 2005). Hence, we propose third and fourth hypotheses:

H3: Price fairness influences behavioural responses.

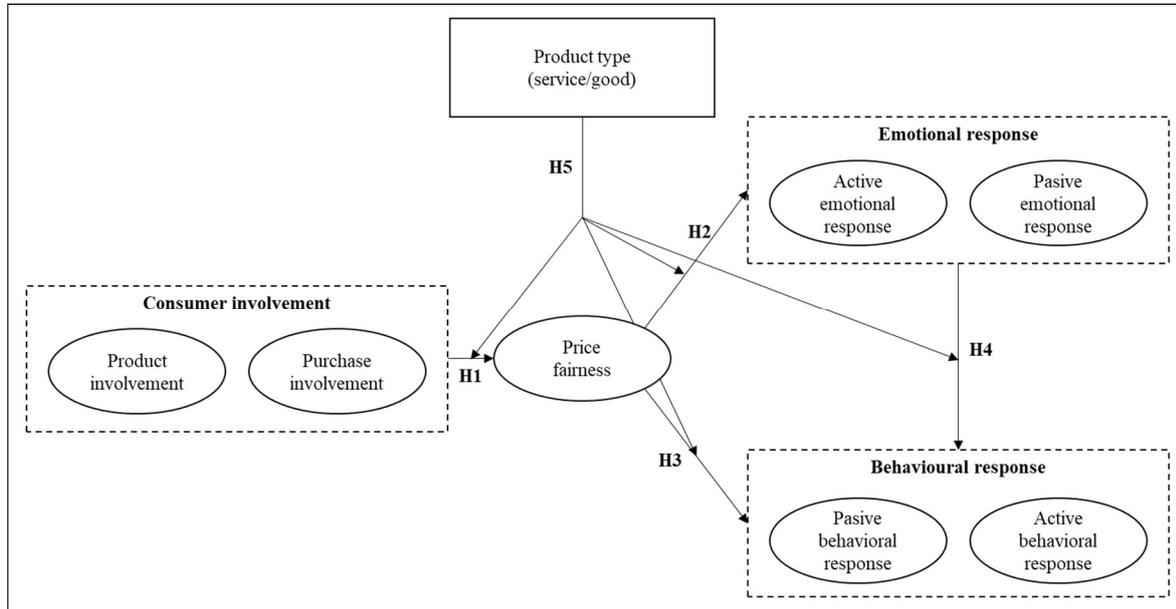
H4: Emotional responses influence behavioural responses.

Previous attempts in studying price fairness in services environment were at least in part overshadowed by the research on overall service fairness (Seiders & Berry, 1998; Han, Kworntnik, & Wang, 2008) and particularly, service recovery (De Ruyter & Wetzel, 2000; Van Vaerenbergh, Orsingher, Vermeir, & Lariviere, 2014). Bolton and Alba (2006) were among the first to provide a more detailed investigation of good and service differences in relation to price (un)fairness. They found that respondents perceive an increase in the price of goods as less fair than an increase in the price of services. One explanation provided by the authors was that price of goods may be perceived as less flexible and subject to change (Bolton & Alba, 2006). Additionally, Simon and Fassnacht (2019) argue that customers tend to agree more with price differentiation when it comes to services, rather than when it is about goods. Possible explanation is that with services and their intangible and variable nature, consumers expect the price to vary to a certain extent. Following this logic, an equal relative price increase may be less impactful in emotional terms, and consequently, price fairness perceptions may be more favourable in the case of services compared to goods. Hence, our last hypothesis:

H5: Product type (goods/services) moderates the relationships between the researched constructs.

Conceptual model in Figure 1 presents an overview of our hypotheses.

Figure 1: Conceptual model



3. Methodology

3.1 Procedure

Data was collected with structured web questionnaire. We first asked participants to assess product involvement, and purchase involvement in relation to good (mobile phone) and service (subscription mobile plan). Afterwards, they read one of two (random assignment) short e-shopping scenarios:

Imagine that you are buying a [good/service] via Internet. After examining several offers, you choose a [good/service], that suites you (brand and provider of the product/service are irrelevant). Price of this [good/service] is [819 € / 33€/month]. After you have made the purchase you talk to your friend and find out that he/she bought the same [good/service] for [479 € / 19€/month].

After reading the scenario, participants assessed price fairness, evaluated possible emotional responses and provided likelihood evaluations on a set of behavioural reactions.

3.2 Sample

Participants were economics and business students (average age = 20,5) from local university who participated in a broader research project. Participation was exclusively voluntary and they did not receive any type of payment for participating in the study. After checking for incomplete responses, 225 participants were included in data analysis.

3.3 Instruments

The main part of this research were the shopping scenarios where we varied the type of the product (good / service) and consequently its price. We established price points for

observed and reference prices through a pilot study where independent sample provided assessments of normal prices for particular good or service (reference price) as well as assessments of upper price thresholds (observed price). In both cases, observed price is approximately 1.7 times higher than the reference price. Specific types of products (good/service) originate from same pilot study results where both exhibited similar customer involvement levels.

Table 1 provides a short outline of research instruments adopted for this study.

Table 1
Overview of instruments for data collection

Scale	Items
Price fairness scale (self-generated)	3 items (fairness, acceptability, reasonability) measured on a 5-point scale (e.g. 1 – completely unfair; 5 – completely fair)
Emotional reactions scale (adapted from Richins, 1997)	2 dimensions: passive (4 items) and active (2 items) emotional response on a 7-point intensity scale (e.g. 0 – no response; 6 – high intensity response).
Behavioural reactions scale (self-generated)	2 dimensions: passive (2 items) and active (2 items) behavioural response. Respondents provided their likelihood of particular response from 0 to 100.
Customer involvement scale (Laurent & Kapferer, 1985; Mittal, 1995)	6 items in total – 3 for product involvement and 3 for purchase involvement; measured on a 5-point scale.

4. Results and interpretation

In order to analyse our conceptual model we used AMOS 24.0 software package where we applied the two-step procedure (Anderson & Gerbing, 1988) to establish the reliability and validity of the latent variables before testing the structural model and the hypothesized relationships (Hair, Celsi, Oritinau, & Bush, 2013; Fornell & Larcker, 1981).

Values of average variance extracted (AVE) all showed appropriate convergent validity ($0,510 < AVE < 0,768$). Internal consistency also appears to be sufficient with values of composite reliability (CR) exceeding the suggested level of 0,7 ($0,711 < CR < 0,908$). Fit indices indicated a good fit of our structural model ($\chi^2/df = 194,794/131$; $p < 0,01$; $GFI = 0,923$; $NFI = 0,910$; $IFI = 0,968$; $TLI = 0,958$; $CFI = 0,968$; $RMSEA = 0,047$). Additionally, values of squared correlations exceeded the values of AVE in every instance, which combined with the results of heterotrait-monotrait ratios (HTMT) of correlations (all below 0,6) also supports the notion of discriminant validity between the constructs.

Furthermore, we present the results of our analyses for two separate structural models. Table 2 shows parameter estimates for both product types.

Table 2
Parameter estimates comparisons based on type of product (good/service).

Path	Physical good	Service
H1: INV _{pro} → PF	0,050	0,225
H1: INV _{pur} → PF	0,220 *	-0,092
H2: PF → ER _p	-0,616 **	-0,376 **
H2: PF → ER _a	-0,443 **	-0,143
H3: PF → BR _p	-0,323 *	-0,173
H3: PF → BR _a	-0,035	-0,128

H4: ERp → BRp	0,285 ^a	0,499 **
H4: ERp → BRa	0,193	0,234 ^a
H4: ERa → BRp	0,104	0,028
H4: ERa → BRa	0,134	0,299 *

Fit indices

χ^2	194,087 (df = 141, p = 0,002)	217,686 (df = 141, p = 0,000)
GFI	0,848	0,854
CFI	0,949	0,926
TLI	0,938	0,911
IFI	0,950	0,928
RMSEA	0,059	0,068

INVpro – product involvement, *INVpur* – purchase involvement, *PF* – price fairness, *ERp* – passive emotional response, *ERa* – active emotional response, *BRp* – passive behavioural response, *BRa* – active behavioural response.

** $p < 0,01$

* $p < 0,05$

^a $p < 0,1$

In the case for physical good (mobile phone), price fairness has a significant influence on passive and active emotional responses. On the other hand, for service (subscription plan), price fairness influences only passive emotional response, which in turn influences passive behavioural response. Consumer involvement does not appear to have any impact on perceptions of price fairness in the case of services, while in goods this influence exists but only for purchase involvement. Overall, fit indices show an acceptable structural model fit for physical good, despite lower GFI and higher RMSEA value. Both of these indices are absolute measures and thus, more affected by sample size (Ainur, Sayang, Jannoo, & Yap, 2017; Shevlin & Miles, 1998; Steiger, 2007). Fit indices for service scenario differ from the previous case; however, they still pass the suggested thresholds.

Comparison of both models indicates that price fairness has greater impact on emotional and behavioural responses when the type of product is a physical good. On the other hand, in the service condition behavioural responses are in larger part influenced by emotional responses, with the role of cognitive judgment being noticeably smaller.

5. Conclusion

The purpose of present study was to investigate the relationship between price fairness, consumer involvement, emotional responses, and behavioural responses across two product types: good and service.

Analysis revealed that price fairness influences emotional and behavioural responses differently when it comes to goods, compared to when focus is on services. First, in the physical good scenario, price fairness influences both passive and active emotional responses; however, it only provokes passive behavioural responses, where little to no effort is required from consumer. Additionally, only consumer purchase involvement affects price fairness, whereas product involvement had no significant effect.

Second, in the service scenario, price fairness only appears to evoke passive emotional responses, which in turn evoke passive as well as active behavioural reactions. There appears to be no relationship between price fairness and active emotional or active behavioural response. Relationships between consumer involvement and price fairness were insignificant for both types of involvement.

In light of these results, we reject hypothesis 1, that consumer involvement influences price fairness perception. The only exception is purchase involvement in physical good

scenario. Physical goods and especially mobile phones from this study often exceed their functional role and represent visible and tangible social proof, which is not the case for services (e.g. subscription plans). Consumers invest their time and energy in their decision in order to choose the right phone in a wide array of alternatives. Such heightened purchase involvement consequently appears to have an effect on perceived price fairness.

Second hypothesis stated that price fairness influences emotional responses. Our results confirm this in all cases except for the relationship between price fairness and active emotional response in service scenario. Hence, we confirmed H2. As noted before, consumers expect service price to vary at least to certain extent (Bolton & Alba, 2006; Simon & Fassnacht, 2019) and active responses in terms of hate and/or contempt are less evident.

Third hypothesis that price fairness affects behavioural responses was rejected. Results of this study reveal the hypothesised relationship only in the case of physical good, and specifically for the relationship between price fairness and passive behavioural responses. However, as it appears in service model, it is not price fairness, but the passive emotional response, that spurs behaviour. Service consumers are often complementary actors in service delivery and their inputs arise more readily. Also, the connection between the service and its' provider is more visible, even more accessible, compared to product brand or provider of the physical good. Overall, hypothesis 4, that emotional responses influence behaviour can be partially confirmed.

Differences in both structural models allow us to (partially) confirm hypothesis 5. Observed differences show that product type (good or service) generates different responses to price fairness – both in emotional and behavioural aspects. While price differences in goods and associated price fairness perceptions evoke salient emotional responses, they have little to no impact on behavioural reactions. Behavioural reactions are more evident in service scenario, especially passive behavioural responses where consumers can plainly exclude the unfair provider or its offerings from future consideration. As Oliver (1996) notes, emotional responses depend on the perceived cause of emotions and are oriented either inward (e.g. sadness as a passive response) or outward (e.g. hate as an active response). In the case of physical goods, consumers may be more likely to attribute incorrect choices to themselves, hence no repercussions for the provider. However, in the case of services, where intangibility and variability is more characteristic the attributions target service providers. It is also likely that general social norms discourage expression and acting on emotions such as hate and contempt. Taken that into account, consumers may experience such active emotional responses privately and not act on them.

5.1 Managerial implications

Present research sheds a light into differences between price fairness perceptions and their consequences in selling of goods and selling of services. These differences highlight the importance of passive emotional reactions in service environments and consequently passive behavioural outcomes, which include the exclusion of the “unfair” provider or its products from future deliberations. The relationship between consumer and service provider stagnates or even deteriorates. Thus, passive repercussions as a result of perceived price (un)fairness appear more harmful, because they may be more difficult to trace. According to our results, we propose that service providers take a proactive and controlled approach in gathering negative feedback and provide an accessible and open two-way communication channels. Previous research also identified that when consumers complain to the marketers they experience a reduction in dissatisfaction, which does not hold true when they take a more active approach and complain publicly (Nyer & Gopinath, 2005). Companies can benefit also from training their sales personnel to be conscious of signs of sadness and disappointment in their customers in order to provide them instant outlet to express their dissatisfaction.

5.2 Limitations and future research

Readers should view the results of this study in light of certain limitations. Sample size and sample characteristics (students) might limit broader generalization of our findings. Sample size also limited the available analytical approaches, which could provide a more robust investigation of the data. One notable restriction also stems from the specific products in our study. Mobile phones and mobile subscription plans are complementary by nature and often sell in a bundle (Yan & Pei, 2009). Customers may have to buy mobile phone along the subscription plan to obtain the full utility of the products. Consequently, the focus on the price is often spread between both of them – and not necessarily in a uniform manner. Some people may put more emphasis on acquiring a better deal on the service end; on the other hand, particularly young adults may favour more the tangible product. Especially if that product is their future mobile phone. Finally, some authors also warn that scenario based research may provide some over- or understated reactions to consumer responses, compared to real world experiences. Kim and Jang (2014) note that respondents in scenario based studies may understate their negative emotional and behavioural responses and overstate their positive evaluations (e.g. overall satisfaction).

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Matrix type product display: Its concept and effectiveness

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Abstract:

The method of product display has been of great interest in academic and practical areas. Above all, the comparison between vertical and horizontal display has been the focus of existing research. For example, Deng et al. (2016) found the advantage of horizontal display from the perspective of consumers' perception and actual behavior. In this paper, using the concept of matrix type product display, we reveal the advantage of horizontal display isn't universal. Two Studies examine that consumers perceive greater ease of comparison and higher evaluation on the matrix type display regardless of whether it is a horizontal or vertical display.

Keywords: *matrix format, product display, ease of comparison*

1. Introduction

The question of how to align multiple products when presenting them to consumers has been of great interest in both academic and practical areas. Among many approaches to examine the methods of product display, the comparison between vertical and horizontal display has often been the focus of existing research. For example, utilizing field experiments, lab experiments and eye tracking tests, Deng, Kahn, Unnava, and Lee (2016) found that when presenting the same assortment in these two variations, displaying products horizontally evoked a perception of higher variety for consumers, leading them to actually choose a wider variety of products (as measured by number of unique options selected). They explain their results by pointing to the fact that the human binocular field of vision stretches out horizontally and that the dominant direction of eye movement is horizontal, which harmonizes with the horizontal display. Due to these characteristics of human vision, information processing fluency and perceived variety are higher when viewing something displayed horizontally.

However, do these findings mean that horizontal display advantages are remain the same under all situations? Regarding this issue, Ariga (2018) conducted a 2 x 2 between-subjects factorial design experiment in which he had Japanese participants read vertically or horizontally oriented texts and then proceeded to expose them to horizontal or vertical displays. As a result, participants who had read the horizontal text in advance selected more variety when viewing the horizontal display, whereas participants who had read the vertical text in advance selected more variety when exposed to the vertical display. Thus, Ariga (2018) shows that horizontal display is not universally superior to vertical display.

To follow up on Ariga (2018) and further clarify that the advantage of horizontal display over vertical display is situationally dependent, in this study we introduce the concept of matrix type product display. Numerous studies have shown that the way information is presented has a significant effect on information processing (Jarvenpaa, 1989; Kleinmuntz & Schkade, 1993; Schkade & Kleinmuntz, 1994). In Kleinmuntz and Schkade (1993), for example, the authors show that when the same information is presented in a matrix and a list, the former requires less effort in information processing (measured in terms of decision-making time) than the latter. The effectiveness of matrix type in information display has been confirmed in many existing studies. In this paper, we verify that the matrix type is also effective in product displays. Study 1 examines that consumers perceive greater ease of comparison and higher evaluation on the matrix type product display compared with the non-matrix type display. Study 2 reveals the mechanism that leads to the advantage of matrix type product display.

2. The concept of matrix type product display

In connection with above discussions, Okano, Amano, Araki, and Konishi (2006) focus on the determination of similarity between two patterns consisting of a white or black oval pattern and show that compared to the patterns in fig. 1a, it is easier to determine pattern similarity in the case of fig. 1b. In the case of fig. 1b, when checking whether the leftmost white oval is common to the two patterns, for example, there is no obstacle positioned between them, making the comparison easy. On the other hand, in the case of fig. 1a, when comparing the leftmost white oval between the two patterns, other ovals interfere, making it difficult to determine their similarity. Here, since each pattern is composed of twelve ovals, fig. 1b can be interpreted as being displayed in a 2 x 12 matrix format, but fig. 1a is not displayed in a matrix format. Thus, for matrix type display, when comparing specific components (e.g. the

leftmost white oval) between different objects, other components do not interfere. In the case of non-matrix type display, however, when specific components are compared among different objects, other components intervene and become an obstacle. This explains the ease of comparison for matrix type display.

Fig. 1a. Horizontal placement

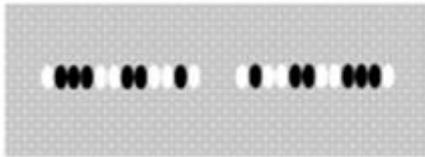
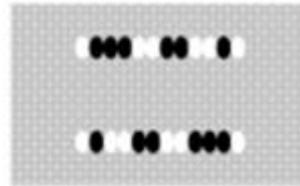


Fig. 1b. Vertical placement



Source: Okano et al. (2006), p.1992.

Based on the above consideration, let us now consider the concept of matrix types in product display, taking a notebook PC as an example. When a typical notebook PC is opened and displayed, the screen is located at the top and the keyboard at the bottom. At this time, by displaying the multiple products in a horizontal manner, consumers can easily compare screen to screen or keyboard to keyboard between products. On the other hand, when the products are displayed vertically, trying to compare screens (keyboards) between products becomes difficult as keyboards (screens) intervene and obstruct a direct comparison. In this case it can be said that the former horizontal display of notebook PCs corresponds to a matrix type, the latter vertical display to a non-matrix type.

Given this, we can define a matrix type and non-matrix type in product display, if the components of a product can be separated vertically or horizontally, like a display and a keyboard of a notebook PC. Thus, for such product display, it is no longer horizontal or vertical display that determines ease of comparison, but instead whether products are displayed in a matrix format or not. Furthermore, it is conceivable that such ease of comparison leads to a positive evaluation of the entire display. From the observations thus far, we propose the following hypotheses.

H1. Regarding the products where components are separated vertically or horizontally, regardless of whether products are displayed horizontally or vertically, ease of comparison is higher in the case of a matrix type display than a non-matrix type display.

H2. Regarding the products where components are separated vertically or horizontally, regardless of whether products are displayed horizontally or vertically, a matrix type display is evaluated higher than a non-matrix type display.

H3. The high evaluation of matrix type display is mediated by its ease of comparison.

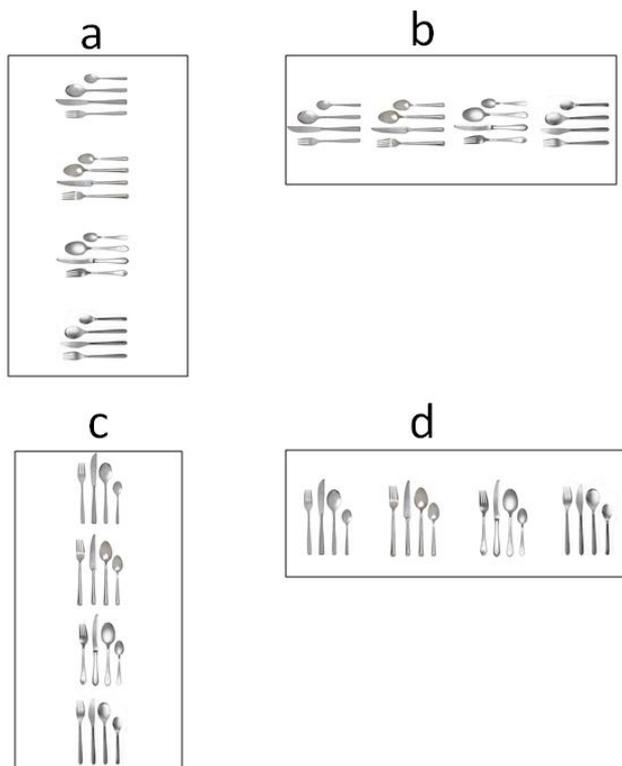
3. Study 1

3.1 Stimuli

To examine the effectiveness of matrix type display, we used cutlery sets in Study 1. Each cutlery set was composed of four cutleries: a fork, a knife, and long and short spoons. Therefore, in Study 1, we can say that these four cutleries (fork, knife and spoons) are the

components that make up each product (cutlery set). When arranging each cutlery set horizontally (fig. 2a and 2b), the horizontal display in fig. 2b becomes a matrix type display, which is assumed to make it easy for consumers to compare forks (knives/spoons) with each other among different cutlery sets. On the other hand, the vertical display in fig. 2a becomes a non-matrix type display, making it difficult for consumers to compare forks (knives/spoons) among cutlery sets due to other cutleries interfering. Conversely, if each cutlery set is arranged vertically (fig. 2c and 2d), the vertical display in fig. 2c becomes a matrix format, making it easy for consumers to compare forks (knives/spoons) with each other among different cutlery sets. On the other hand, the horizontal display in fig. 2d becomes a non-matrix type display, making it difficult for consumers to compare forks (knives/spoons) among cutlery sets due to other cutleries interfering.

Fig. 2. Four types of cutlery set display



3.2 Method

Participants ($N = 362$, 66.6% male, $M_{\text{age}} = 45.6$) were recruited using Yahoo! Cloud Sourcing online subject pool. Participants were randomly divided into four groups and each group was told to look at one out of four - 2 (product direction: vertical vs. horizontal) x 2 (display direction: vertical vs. horizontal) product displays. The four different displays of cutlery sets are shown in fig. 2a-2d., with 2b and 2c being matrix type displays and the others being non-matrix type displays, as mentioned previously. After viewing their respective product display, participants responded to questions about their ease of comparison (1. not at all easy - 7. very easy) and display evaluation (good / preferred / attractive; $\alpha = 0.892$).

3.3 Results

A two-way ANOVA with ease of comparison as the dependent variable showed that the interaction between the two factors was significant ($F = 10.296$, $p = .001$, $\eta^2 = 0.027$). Then, as a result of analyzing the simple main effect, when the product direction was horizontal, the value for ease of comparison was significantly higher for the horizontal display than the vertical display ($M_{\text{horizontal}} = 4.691$ vs. $M_{\text{vertical}} = 4.256$; $t = 2.026$, $p = .043$, $d = 0.30$). In contrast, when the product direction was vertical, the value for ease of comparison was significantly higher for the vertical display than the horizontal display ($M_{\text{vertical}} = 4.337$ vs. $M_{\text{horizontal}} = 3.800$; $t = 2.513$, $p = .012$, $d = 0.50$). Thus, H1 is supported.

Next, we performed a two-way ANOVA with display evaluation as the dependent variable and found that the two-factor interaction was significant ($F = 7.876$, $p = .005$, $\eta^2 = 0.021$). Then, as a result of analyzing the simple main effect, when the product direction was horizontal, the value for ease of comparison was significantly higher for the horizontal display than the vertical display ($M_{\text{horizontal}} = 4.199$ vs. $M_{\text{vertical}} = 3.833$; $t = 1.984$, $p = .048$, $d = 0.30$). On the other hand, when the product direction was vertical, the value for ease of comparison was significantly higher for the vertical display than the horizontal display ($M_{\text{vertical}} = 4.004$ vs. $M_{\text{horizontal}} = 3.641$; $t = 1.986$, $p = .048$, $d = 0.39$). Thus, H2 is supported.

A mediation analysis (Hayes 2017, Model 4, bootstrapped 5,000 times) revealed a significant indirect effect from the type of display (1: matrix type, 0: non-matrix type) to the display evaluation through the ease of comparison ($B = 0.315$, $SE = 0.099$, 95% CI [0.131, 0.511]). Thus, H3 is supported.

3.4 Discussion

In Study1, we used four types of product display. When the product direction was horizontal, the horizontal display corresponded to a matrix type display, the vertical display to a non-matrix type display. Reflecting this, both ease of comparison and display evaluation of the horizontal display were higher than for the vertical display. On the other hand, when the product direction was vertical, the vertical display corresponded to a matrix type display, the horizontal display to a non-matrix type display. Reflecting this, both ease of comparison and display evaluation were higher for the vertical display than for the horizontal display. As such, we were able to confirm that the superiority of horizontal display over vertical display is not universal. Instead, the key factor determining ease of comparison and display evaluation is whether it is a matrix type display or not.

4. Study 2

4.1 Motivation

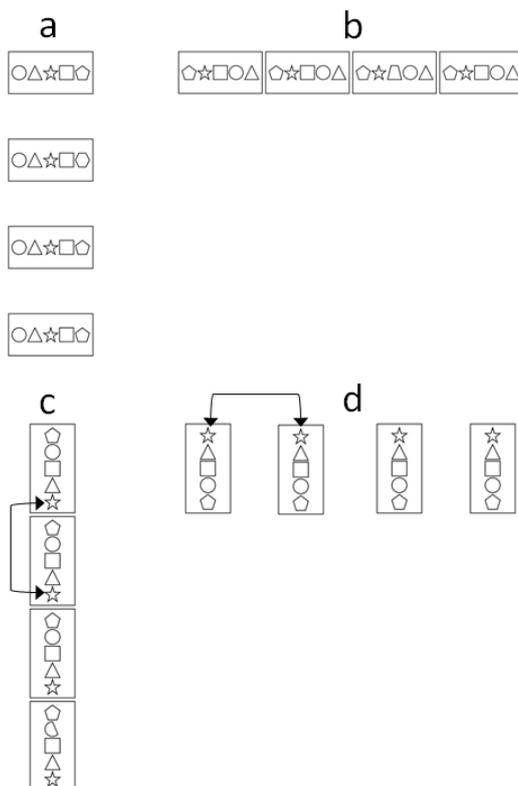
Study 1 examined the superiority of matrix display over non-matrix display. The superiority was explained by the facts that for non-matrix type display (fig.2a, 2d), when comparing a specific product component (e.g. fork) among different products, other product components (e.g. knife, spoon) interfere, whereas for matrix type displays (fig.2b, 2c), no other product components interfere and obstruct the comparison. Alternatively, the results of study 1 could also be explained as follows: for example, if the product direction in Study 1 is vertical, the distance between the same product components (fork and fork, knife and knife, etc.) among multiple products is shorter for the matrix type display in fig. 2c than the non-matrix type display in fig. 2d. Therefore, we could also say that the reason for ease of comparison being

higher for the matrix type display is not because no other product components interfere when comparing two of the same type of product components (fork and fork, etc.) among multiple products, but because the product components to be compared are positioned closer to each other. If we assume that this is correct, ease of comparison for matrix type display will disappear if for whatever reason the distance between product components to be compared in a matrix type display grows. Study 2 was implemented to rule out the possibility that a matrix type display's ease of comparison could solely be attributed to a shorter distance between compared product components.

4.2 Stimuli

In Study 2, an experiment was conducted utilizing stimuli such as shown in fig. 3. Each stimulus is composed of four shape sets, with each shape set being composed of five types of shape elements (circle, square, etc.). The stimuli are either of identical condition (the arrangement of shape elements within the four shape sets is identical) or non-identical condition (the arrangement differs among shape sets, even if partly). For example, for the stimulus in fig. 3d, all shape elements included in the four shape sets are identical, but for the stimulus in fig. 3c, the second shape element from the top in the fourth shape set from the top is a semicircle and thus different from its counterparts in other shape sets. For Study 2, we prepared 24 different combinations of stimuli: 2 (shape set direction: vertical vs. horizontal) x 2 (display direction: vertical vs. horizontal) x 6 variations (3 with identical conditions, 3 with non-identical conditions). Here, among the stimuli for which the shape sets are arranged horizontally (figs. 3a, 3b), fig. 3a with the vertical display can be defined as a matrix type and fig. 3b with the horizontal display can be defined as a non-matrix type. Also, fig. 3d is matrix type display whereas fig. 3c is non-matrix type display.

Fig. 3. Four patterns of shape set display



Here, the stimuli are created so that the distance between specific shape elements among different shape sets (star and star, circle and circle, etc.) are identical. For example, the distance between the star-shaped elements indicated by the arrow in fig. 3c is equal to the distance indicated by the arrow in fig. 3d. The same applies to other shapes. Therefore, if ease of comparison of matrix type displays can be confirmed through Study 2, that would not be explained by distance between shape elements to be compared, but because other shape elements do not interfere when comparing specific shape elements among different shape sets.

4.3 Method

We recruited 38 undergraduate students (59.6% male, $M_{\text{age}} = 19.4$) from a major university in Tokyo, and showed them 24 different types of stimuli. The presentation order of stimuli was randomized for each participant. The participants were instructed to press a key after seeing each stimulus and determine whether the stimuli were identical or non-identical. Here, we measured the judgment accuracy for each stimulus as well as the response time needed to press the key.

4.4 Results

Since the accuracy for the identical/non-identical judgement was very high throughout the experiment (overall correct answer rate = 92%) and did not fluctuate with different stimuli, only the response time was used in our analysis to measure ease of comparison. As a result of a two-way ANOVA with response time as the dependent variable, the interaction of shape set direction and display direction was significant ($F = 62.369$, $p < .001$, $\eta^2 = 0.433$). Then, as a result of analyzing the simple main effect, when the shape set direction was horizontal, the vertical display produced a significantly shorter response time than the horizontal display ($M_{\text{vertical}} = 3.390$ sec. vs. $M_{\text{horizontal}} = 4.416$ sec.; $t = 7.281$, $p < .001$, $d = 0.618$). On the other hand, when the shape set direction was vertical, the horizontal display produced significantly shorter response time than the vertical display ($M_{\text{horizontal}} = 3.560$ sec. vs. $M_{\text{vertical}} = 4.440$ sec.; $t = 5.760$, $p < .001$, $d = 0.575$). Therefore, H1 once again is supported.

4.5 Discussion

In Study 2, using response time, we confirm that the ease of comparison for a matrix type display is higher than for a non-matrix type display. As described above, since we make sure the distance between shape elements is equal between for both the matrix type and non-matrix type display, this result can only be explained by the fact that no other shape elements interfere and interrupt the comparison of shape elements among matrix type displays.

5. Conclusion

In this study, we verified that the superiority of horizontal display over vertical display is not universal using the concept of matrix type product displays. As a result, when comparing a matrix type display with a non-matrix type display, regardless of whether it is a horizontal or vertical display, the ease of comparison for the matrix type display is always higher than that of the non-matrix type display, which, in turn, also affects the display evaluation. The advantage of horizontal display that Deng et al. (2016) declared was proven to be not universal by Ariga (2018), who prefixed the task of reading horizontal or vertical text. In contrast, in this research we do not utilize such a task and instead verified from a new

perspective that the superiority of horizontal display is not universal. This finding is the academic contribution of this research.

In addition to the cutlery sets used in Study 1 and the notebook PCs used for the explanation, there are many other products whose elements are arranged vertically or horizontally. For example, a doll is composed of vertically arranged elements such as hair, face, body, and legs. In a photo calendar, the photo portion and calendar portion are arranged either vertically or horizontally. For products such as these, it is better to consider whether their product elements are aligned in a matrix or non-matrix format, rather than merely horizontally or vertically. This can be applied not only to display in offline and online stores, but also to print and online advertisements that present multiple products at the same time. This suggestion constitutes the practical contribution of this study.

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Partitioned country of origin effect on consumers behavior: a meta-analytic review of the empirical evidence

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Abstract:

This study proposes a quantitative assessment of the results of research on partitioned country of origin using a meta-analysis. The authors systematically reviewed a total of 81 independent samples in 64 empirical papers published in the last 30 years, involving 25,483 respondents and 1,239 effect sizes, to assess: a) the overall effect of selected COO sub-components (country of assembly, country of brand, country of design, country of manufacture, and country of parts) on product evaluation, brand evaluation, and purchase intentions; and b) the effect of selected methodological and theoretical characteristics of the studies (e.g., number of cues, sampling procedure, product type, study design, etc.) on the variance of the results. Findings reveal that partitioned country of origin dimensions have a positive, significant influence on consumer behavior in terms of product evaluation, brand evaluation, and purchase decision. The study contributes to the advancement of COO research by facilitating empirical and quantitative assessments of the theoretical and methodological shortcomings that affect the relevance and generalizability of this field of study, identifying and proposing potential avenues for further research.

Keywords: *country of origin, meta-analysis, literature review*

1. Introduction

Literature on international marketing has provided reliable support to the notion that country of origin (COO) biases play a significant role in influencing perception of foreign products and brands: German cars, Italian shoes and French wines, for example, are generally perceived and evaluated differently from, say, USA cars, English fashion and Californian wines. Since the seminal contribution from Dichter (1962) stated that a product's country of origin may exert a "tremendous influence on the acceptance and success of products" (p. 116) literature in this field abounds with examples and research evidence in support of such an argument (Roth & Diamantopoulos, 2009).

According to Biswas and Chowdhury (2011) research on COO effects falls in three distinct categories: research examining the influence of country image on consumers' purchases and product evaluation (Bilkey & Nes, 1987; Eroglu & Machleit, 1988); studies dealing with consumers' perceptions about different countries (Leonidou, Palihawadana & Talias, 2007), and studies researching *partitioned country images* on consumers' product evaluations.

In particular, since the mid 1990's, a significant portion of studies have decomposed the COO construct from a *single measure* or categorical experimental treatment (based on target country) to a *multidimensional operationalization* that allows for testing of different COO sub-categories such as country-of-design (COD), country-of-parts (COP), and country-of-assembly (COA), country of manufacture (COM), country of brand (COB), or country of parts (COP). Research suggest that decomposing COO into its sub-dimensions enables a fuller understanding of COO effects (Insh and McBride, 2004). Moreover, the drastic reconfiguration of global sourcing and the rapid growth of manufacturing relocations in new industrialized countries characterized by low production costs raises critical questions on the effect of delocalization strategies on consumers' perceptions.

In general, results from research on partitioned country of origin have shaded some light on consumers' evaluation of products associated to different countries. For example Chao (1993) in a study on television set found that consumer country of design (COD) and country of assembly (COA) are able to affect consumer evaluations of design and product quality. Such results were confirmed in a subsequent research from Chowdhury and Ahmed (2009), who found a positive influence of COA, COD and COM on consumers' evaluations of product design and manufacture excellence. Interestingly, the effect of country image sub-components seems to be moderated by the perceived level of product complexity. Both research from Ahmed and d'Astous (1995) and a study by Hamzaoui and Merunka (2006) found that COD and COM have different effects depending on the product category considered and that COD's effect increases with high levels of product complexity and consumer involvement, whereas with weaker involvement product quality evaluations are based

more on functional dimensions related to COM. Similarly, Batra et al. (2000) suggested that the COD effect is stronger for product categories that have more social signaling value.

Despite the extensive amount of research that has been conducted on the country of origin effect in the last thirty years, this field of research has been the object of a growing criticism, due to its lack of methodological and theoretical consistency, which negatively affects the relevance and generalizability of results. In a recent review conducted by Lu, Heslop, Thomas and Kwan (2016) it was reported a decline in the appeal of country of origin research. Therefore, the authors suggested a number of viable research directions to renew the interest in the field and they stressed, among the other things, "the paucity of research on service and *hybrid products*" (p. 844).

Based on the above, this paper aims to provide a contribution to the revitalisation of country of origin research and it proposes a quantitative assessment of results of empirical partitioned country of origin studies using a *meta-analysis*. Although this research approach has already been used in previous COO studies (Peterson & Jolibert, 1995; Verlegh & Steenkamp, 1999) it was limited to the evaluation of general COO effects without considering the COO sub-components; and moreover it was used for the last time exactly 20 years ago, thus not considering the more recent developments of this field of research.

The Methodology sections will present the main methodological steps of the meta-analysis: a) criteria for inclusion of the empirical studies; b) selection of the study characteristics that are expected to cause systematic differences in the results of individual studies; c) coding and analysis of the effect sizes. The Results section will describe the results of the ANOVA and it will assess the impact of the various selected theoretical and methodological characteristics on the variance of results, thus providing a better understanding of the factors that may affect the consistency and generalizability of this field of study. Finally, the conclusion section will discuss the research implications and provide guidelines for further research.

2. Methodology

Analogous to most meta-analyses, we started with the identification and selection of a broad range of partitioned COO studies. This examination targeted scholarly peer-reviewed, empirical, English language, full-text online articles contained in the following online databases: *Business Source Complete*, *Science Direct*, *ABI Proquest*, *Emerald Insight*, *Web of Science*, and *Scopus*. The main keywords included the followings: *partitioned country of origin*, *country of assembly* (COA), *country of brand* (COB), *country of design* (COD), *country of manufacture* (COM), and *country of parts* (COP). We allowed for these keywords to appear either in the title, abstracts, or and

keywords in all fields of the papers contained in the databases. Data collection was limited to 1919-2019, and on completion of the search process, we had obtained an initial output of 157 articles.

For the second step, we carefully screened the abstracts of the papers and selected studies for inclusion in the meta-analysis based on two criteria. First, the meta-analysis involved only the papers that were devoted to the empirical analysis of partitioned country of origin dimensions in association with either purchase decision, brand evaluation or product evaluation. Hence, we identified and excluded articles that examined COO effect using general country image, product country image, and country-specific product image. Second, we included in the meta-analysis articles that reported the r family of effects although the d family (measures of the standardized difference between group means) is employed by other meta-analytic studies.

We opted for the r family because they allow analysis of more than two groups compared to the d s that are limited to only two group comparisons. Plus, r_s can be more simply interpreted in terms of practical importance than d s (Rosenthal & DiMatteo, 2001). This way, our analysis included only those studies that reported the correlation coefficient or its variants (F-statistics, T-statistic, beta, regression coefficient, etc.) (Rosenthal & DiMatteo, 2001; Rosenthal, 1994). Thus, papers that did not provide adequate statistical data to calculate the effect size (i.e. correlation coefficients between the variables or the required data to obtain them using conversion methods (Borenstein, Hedges, Higgins, & Rothstein, 2009; Peterson & Brown, 2005) were excluded. This resulted in a total of 79 independent samples reported in 61 empirical papers and a total of 25,483 respondents.

Next, we followed procedures applied in other meta-analyses in marketing for the development of the final database (Santini et al., 2019; Wang & Yang, 2008; Kirca et al., 2005). We first prepared a coding sheet or form that highlighted the information to be extracted from each study to minimize the coding error (Lipsey & Wilson, 2001). We coded four (5) theoretical characteristics and five (5) methodological characteristics of each study. The theoretical characteristics were:

- 1) partitioned country of origin dimensions (*country of assembly (COA), country of brand (COB), country of design (COD), country of manufacture (COM), and country of parts (COP)*)
- 2) number of cues (*multiple or single*);
- 3) outcomes (*brand evaluation, product evaluation, and purchase decision*);
- 4) product type (*general or specific*);
- 5) 5) product category (*automobile, textiles/shoes/apparels, consumer electronics/computers, industrial products, and others*).

With respect to the methodological characteristics, we mapped the retained the following information:

- 6) the country of data collection (*USA, others*);

- 7) the country of the product/brand under evaluation (*USA, others*);
- 8) the sampling unit (*students, general consumer, and managers/purchasing agents*);
- 9) the sampling technique (*probability or non-probability*);
- 10) the study design (*survey or experiment*).

In all, a total of 1,243 effect sizes were included in the analysis. The coding reliability was checked by having each co-author re-read the coded articles, after which several meetings were held to discuss coding discrepancies, and where necessary, to clarify and amend classifications and conversions of the indices.

Following the general computational procedures of effect sizes (Rosenthal & DiMatteo, 2001), we converted all the r variants (F-test, T-test, regression coefficient, etc.) to r . For studies that reported only p -values, we converted the p -values to standard normal deviate Z based on a range given: for $p < 0.05$, $Z = 1.645$; for $p < 0.01$, $Z = 2.326$; for $p < 0.001$, $Z = 3.090$; for non-significant effect, $Z = 0$. Then the standard normal deviate Z values were transformed to the corresponding r (Rosenthal & DiMatteo, 2001, p. 72). Subsequently, we transformed the effect sizes into Fisher's z -coefficients, which were then weighted by an estimate of the inverse their variance ($N-3$) to approach a standard normal distribution and to give greater weight to more precise estimates. Finally, the coefficients were re-converted to effect sizes r_s (Hedges & Olkin, 1985).

Meta-analytic research is analysed using one of two models: fixed effect and random effect models (Zubeltzu-Jaka, Erauskin-Tolosa, & Heras-Saizarbitoria, 2018; Borenstein et al., 2009). In the case of the fixed model, the set of the articles included in the sample of analysis disregard the heterogeneity of the sample and instead assume a unique and true value of the effects between variables with sampling error as the only observe variability (Borenstein, Hedges & Rothstein, 2007). By contrast, in the random model, heterogeneity is tolerated for the variations of the effects (Hunter & Schmidt, 2004). For this study, given the amplitude and variability of the collected studies and the fact that the impact of partitioned country of origin on perception is not homogenous in different circumstances, the random effect of the effect-size method was deemed the appropriate method.

The homogeneity correlations in the studies were examined using the procedures suggested by Hedges and Olkin (1985). Theoretical moderators that could potentially influence the force of effect sizes were evaluated as cues, product type, and product category. As well, the type of design, sampling technique, sampling unit, country of data collection, and brand/product origin were examined as possible methodological moderators that could influence the force of the effect sizes (Hunter & Schmidt, 2004). It is also highlighted that the relative 95% confidence intervals were calculated to establish the significant relations, significant without zero (Glass, 1977). About the significant relations, the index of fail-safe number, which estimates the number of non-significant or

unpublished papers that are required to refute the findings of this study (Rosenthal, 1979), was calculated.

In a meta-analytic study, effect sizes measure the magnitude of the relationship between two variables. In this study, the correlation coefficients denote the degree of association between partitioned country of origin constructs and perception of consumers (i.e., product evaluation, brand evaluation, and purchase decision). The data analysis was performed through the use of SPSS statistical tool and the influence of study characteristics on the effect sizes was statistically assessed through the analysis of variance (ANOVA).

3. Results

The average r of the 1,243 effect sizes recorded in our database was 0.13 (s.d.=0.200), which may be classified as low effect (Cohen, 1988). The null hypothesis of homogeneity was rejected ($p < 0.005$), implying that the variance in effect sizes may be attributed (partly) to the influence of selected nine study characteristics.

In Table 1 we present the mean effect sizes for the five theoretical and five methodological independent variables under investigation. In addition to the effect size means, we reported the standard deviation of effect size, the number of effect sized used to compute the values and the F-value.

ANOVA results showed that the relationships between the selected study characteristics and the effect sizes were statistically significant at $p \leq 0.05$ for seven of the ten independent variables. Therefore, even taking into account the small samples associated to some effects sizes and the dramatic sample size differences within certain independent variables, our results suggest that the relationship between the partitioned country of origin and consumers' evaluations is moderated by the selected studies' characteristics.

In general, results helped to confute and confirm conventional wisdom about country of origin research. For example, the significant effect size differences among the different country of origin dimensions (COM, COA, COB, COD, COP) confirmed that consumers are able to distinguish such COO components (Chao, 1993, 2001) and that they "compartmentalize" country of origin information when evaluating products (Hamazaoui-Essoussi, 2010). Results also supported the notion that consumers infer country associations firstly from the origin associated to the brand name (Country of brand - COB) rather than from where the product was designed or manufactured or assembled (i.e. Thakor, 1996).

The impact of single versus multi cue studies was consistent with expectations based on previous literature (Peterson & Jolibert, 1995; Verlegh & Steenkamp, 1999), confirming that single cue studies produce larger effect sizes than multi cue studies.

Interestingly, results of our analysis contradicted the notion that country of origin effects are more willing to affect consumers' evaluation of products and brands rather than purchase intentions. However, such discrepancy might be biased by the different sample sizes associated to the selected moderators.

The significant effect size differences related to the stimulus product type (automobile, textiles/shoes/apparels, consumer electronics/computers, industrial products, others) confirmed that country of origin sub-components represent an important determinant of consumers' evaluation especially for product with social status meanings (automobiles, apparels), but not for technologically complex products (consumer electronics, computers). These findings supported conclusions of Hamzaoui and Merunka (2006), while they contradicted results reported by Eroglu and Machleit (1989) and Hamzaoui-Essoussi (2010).

A common criticism of country of origin research is that generalizations regarding country-related consumption behavior is often based on samples from the United States and/or are related to the evaluation of US products. Our results about effect size differences based on the country of data collection, while on the one hand confirmed that country of origin research is mostly US-based – since the overall number of effect sizes collected on US respondents doubled the number of effect sizes collected in the rest of the world –, on the other end they showed that US consumers tend to underestimate the role of partitioned country of origin dimensions when evaluation products/brands compared to non-US respondents. This contradicts results from a previous meta-analysis on country of origin research conducted by Peterson and Jolibert (1996). Moreover, in our study there was not a significant difference between evaluation of US versus not-US products.

Another criticism of country of origin studies is the common use of student samples, which leads to poor generalizability. In particular, some researchers have pointed that country of origin effect is smaller for students compared to general consumers because the first are younger and usually higher educated than the latter. Therefore, since it has been shown that country of origin effect are usually lower for young and highly educated consumers (Usunier, 1996), it was argued that the use of student sample might yield to smaller effect sizes compared to representative consumer samples. This assumption was confirmed by our results, thus contradicting previous meta-analysis conducted by Peterson and Jolibert (1995) and by Verlegh and Steenkamp (1999).

Finally, in our study we found that the effect sizes of studies based on surveys were significantly larger than the effect sizes stemming from research based on experiments, while the use

of probabilistic versus non probabilistic sampling techniques did not affect the variance of the effect sizes.

Table 1. Main effect sizes for the 10 selected study characteristics

Study characteristics	Mean	Standard deviation	Number of effect sizes	F-value
1. PARTITIONED COUNTRY OF ORIGIN DIMENSIONS	0.15	0.20	1,057	5.104***
Country of manufacture (COM)	0.17	0.22	261	
Country of assembly (COA)	0.13	0.18	248	
Country of brand (COB)	0.22	0.26	97	
Country of design (COD)	0.14	0.19	277	
Country of parts (COP)	0.13	0.15	144	
2. CUES	0.13	0.20	1,203	39.129***
Single cue	0.18	0.19	696	
Multi cue	0.10	0.21	507	
3. OUTCOMES	0.13	0.20	1,242	5.619**
Product evaluation	0.12	0.17	1,011	
Brand evaluation	0.13	0.21	103	
Purchase intentions	0.19	0.35	128	
4. PRODUCT TYPE	0.13	0.20	1,242	n.s.
General	0.13	0.16	1,167	
Specific	0.09	0.48	75	
5. PRODUCT CATEGORY	0.13	0.20	1,222	3,217**
Automobile	0.13	0.14	245	
Textiles/shoes/apparels	0.15	0.16	268	
Consumer electronics/computers	0.10	0.17	393	
Industrial products	0.13	0.10	126	
Others	0.14	0.36	190	
6. COUNTRY OF DATA COLLECTION	0.13	0.20	1,242	61.526***
USA	0.10	0.17	835	
Other	0.19	0.24	400	
7. COUNTRY OF THE PRODUCT/BRAND	0.11	0.20	701	n.s.
USA	0.10	0.16	376	
Other	0.13	0.25	234	
8. SAMPLING UNIT	0.13	0.24	1,242	16.334***
Students	0.10	0.24	451	
General consumer	0.14	0.16	753	
Managers/purchasing agents	0.28	0.21	38	
9. SAMPLING TECHNIQUE	0.13	0.20	1,242	n.s.
Probability sampling	0.13	0.20	1,003	
Non-probability sampling	0.15	0.20	239	
10. STUDY DESIGN	0.13	0.13	1,242	16.835***
Survey	0.14	0.18	880	
Experiment	0.09	0.24	362	

*** = $p \leq 0.001$

** = $p \leq 0.05$

4. Conclusion

As for our knowledge, this is the first study to employ a meta-analysis to assess the results of empirical research on partitioned country of origin effect under a variety of research conditions. In doing so, this study contributes to the advancement of this field of research by facilitating an empirical and quantitative assessment of the theoretical and methodological characteristics that may affect the validity and generalizability of results.

Based on the analysis provided by this quantitative review, a potential research agenda for the field would include at least three possible directions. First, since the geographical focus of the effect sizes is mostly restricted to USA, it is evident that more research is needed in a cross-national context.

Second, it is clear that the adoption of a single-cue approach tends to overestimate the effect sizes. Therefore our recommendation is to put more effort into multi-cue research projects.

Third, in term of sampling procedure a clear indication of our study is that since the effect size differences are strongly influenced by the sample units included in the studies, the generalizability of results is penalized by the large use of student samples, which lead to an underestimation of the effect sizes. Conversely, our research corroborates the need to assess the evaluation of COO sub-components within purchase agents/managers. Given the growth of foreign direct investment (FDI), the increasing delocalization of multinational enterprises' operations, and the subsequent fragmentation of supply chains, a clear understanding of how managers and purchase agents perceive and manage the complexity underlying the "decomposition" of the products' origins would provide a significant contribution to improve the managerial relevance of this field of research.

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Gamification as a method to provide deeper insights in the CX market research

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Abstract:

Gamified market research tools help to increase respondents' engagement and obtain more in-depth results. Measuring customer experience (CX) is considered one of the most important trends in con-temporary marketing research. Due to the specificity of this field elaborated projective and narrative techniques need to be applied to better reconstruct the customer journeys. The main goal of this paper is to present the areas of use of the gamified CX method: Our City board game, the results of the qualitative validation study of Our City as well as the experiment proving the accuracy of the psychological premises of this tool.

Keywords: *gamification, market research, customer experience*

1. Introduction

Customer experience (CX) is one of important themes in the contemporary marketing – it is a subject of numerous articles and scientific studies (e.g. Meyer and Schwager, 2007; Cetin and Dincer, 2014; Vasconcelos et al., 2015). It's a wide concept affecting all stages of the decision process and multiple touchpoints.

Customer experience affects customers' satisfaction (Anderson and Mittal, 2000), their loyalty towards a brand and creating a more in-depth relationship of participants (Paharia, 2013), and their eagerness to recommend a brand - word-of-mouth (Keiningham, Coil, Aksoy, Andreassen and Weiner, 2007) across the channels – both traditional and digital.

Since customer experience became a focus of attention of the marketing practitioners, the matter of its measurement has been gaining importance. In the literature there are many attempts to identify the CX components. Dziewanowska (2015) presents a thorough review of different approaches towards defining the frames of the customer experience.

Beside purely theoretical approaches towards customer experience, there are some empirical attempts at measuring CX. Klaus and Maklan (2013) have created a EXQ scale CX consisting of four dimensions: product experience, outcome focus, moments-of-truth and peace-of-mind. It touches upon numerous aspects related to product competitive advantages, customer experience in the process, how a brand functions and reacts in key moments.

CX is a field where emotions play a significant role. They serve as a kind of conveyor belt transforming individual experience into recollections. If a customer can remember some event after a longer period of time, this is usually possible if they are able to link it to some emotions. The more intense are emotions, the better and more durable is the recall. Continued use of brand services, customer's loyalty towards the brand, intention to increase intensity of using, or using a broader range of products and services, are conditioned not just by the sole experiences but by the way consumers recall them (Kahneman, 2010).

2. Qualitative approach towards CX studies – „Our City” game

„Our City” is a board game designed in Kantar Polska to add more in-depth component to the standard qualitative CX research processes based on the cognitive interviews (Geiselman et al. 1984), which are dedicated for one-to-one contact. We wanted to merge the advanced techniques of episodic memory recollection (Tulving, 1972) with the benefits of the group process (Brown, 1988). It resulted in creating a gamified qualitative tool dedicated to thorough exploration of the customer journeys.

Gamification in market research improves involvement of participants and lets us obtain information which is not available in traditional approaches. The experiments show that tasks based on gaming mechanics are more effective than the traditional ones (e.g. Harrison, 2011; Puleston and Sleep, 2011; Puleston and Rintoul, 2012; Ścibor-Rylski, 2018; Ścibor-Rylski, 2019). Involved in a pleasant activity, people are more sincere, engaged, creative and it’s easier to discover their hidden beliefs and motivations. Moreover, the group process is smoother and the interaction more natural and efficient.

Designing „Our City” we hoped to create a tool which would let us enter the decision making process, explore its stages and get to know the importance of all the relevant touchpoints, as well as enable interaction of participants and which could be used during FGIs.

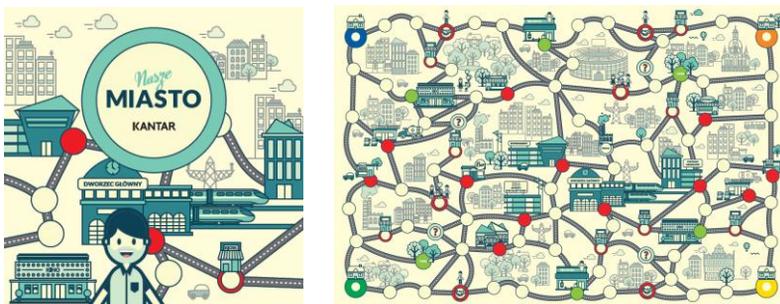


Figure 1. Cover and board of „Our City” game

„Our City” consists of a board, a set of elements required for the game mechanics and the set of rules. The tool may be used to carry out various research goals:

1. Reconstruct a complex decision making process/ customer journey
2. Identify and explore the Category Entry Points together with mental availability of brands (Sharp, 2010).
3. Explore any occasion / situation which could take place in respondent's city. „Our City” then serves as a narrative technique.

The strength of Our City lies in the combination of a board game involving participants with an elaborate narrative technique which lets a researcher understand individual customer experience: pain points, success points, moments of truth etc.

3. Qualitative validation of „Our City” game

A qualitative validation of „Our City” tool effectiveness was run. The main goal was to verify the mechanics of the game, its fit to the research purpose and the obtained opinions expressed by participants.

The theme of validation study was customer experience related to buying a new car. 18 residents of Warsaw and the suburbs participated in this study: both men and women, aged 24-58. All of them bought a new car in the past 6 months. The process consisted of two stages. In the first one all respondents took part in an online study (a bulletin board on Krealinks platform). The goal of this stage was to get to know participants, to get an initial view of decision making processes and to eliminate less involved respondents. At the second stage three focus group interviews were run, each with four participants and lasting 3h. During the FGI participants played „Our City” game reconstructing all the stages of their decision making processes and thoroughly describing customer experience in individual touchpoints. After each session was completed an additional interview was held with all the participants.

The outcome of qualitative validation is positive – we have achieved highly detailed data combined with involvement of participants of the study. The group process (e.g. Brown, 1988) helped to increase self-awareness of respondents during the FGI - they referred to opinions expressed by other participants, confronting them with

personal experience, and finally recalling some elements of own processes they could not remember during the online stage. Additionally, the story structure imposed by „Our City” game mechanics has led to adding structure to individual narratives and to arriving at a more in-depth customer experience analysis in particular touchpoints.

Participants of the validation process expressed very positive opinions about their experience with the „Our City” game and found it more interesting than the standard research approach. The respondents also admitted that during the game they managed to recall experience they could not remember at the preceding online stage. Competition being an element of the game mechanics generated a favourable response as well. These observations are confirmed by the quotations from the interviews held after completing the „Our City” game:

„This is a fairly interesting type of experience, I have figured out what my decisions were like, what the process was like and I discovered that it was not so simple at all.”, Katarzyna, 50

„Competition in this game was motivating. It was such a trigger to get even more involved.”, Mateusz, 24

„The game structured the whole process which was long, and in normal conditions, if we were talking about it without the game, I would present it in a much more chaotic manner, here I was able to order it and to focus on what mattered most in fact.”, Agnieszka, 54

The results of the qualitative validation of „Our City” tool prove its effectiveness both on the level of obtained information and the participants’ satisfaction.

4. Experimental validation of the psychological premises of „Our City” game

“Our City” game was designed to put the recollection of the customer journey in the context similar to the real circumstances of the memorization. It contains a map of the city with all important spots and also several jokers, which allows the players to choose their own, unique touchpoints. The game also provides options for recalling online elements of the decision processes.

4.1. Research problem and hypothesis

Well-known psychological experiments proof that people are much more efficient in the recollection of information in the conditions similar to those present during the process of memorization (Godden and Baddeley, 1975). Designing "Our City" we assumed that episodic memory and in particular, autobiographical memory (Tulving, 1972) will work the same way: players will more easily recall the details of the subsequent phases of their decision process if they participate in its simulation on a board depicting the touchpoints they "visited" during the customer journey. The goal of the described experiment was to verify this assumption. A hypothesis was formulated:

Hypothesis: the effectiveness of the recollection of episodic memory elements is higher when people has access to the visualization of the space present during the memorization process, than in condition without this element.

4.2. Experimental design

The participants was asked to recommend places to eat something out in Warsaw. It's a task that engages episodic memory and encourages people to recall the places that have left good impression.

78 students of University of Warsaw participated in the experiment (53,8% women and 46,2% men). They were randomly assigned to three groups:

- control group was asked to recommend some places to eat something out in Warsaw without any experimental manipulation.
- experimental group 1 was given a task based on gamified context method. Referring to the results of the experiments proving the effectiveness of gamification in marketing research (Puleston and Sleep, 2011), such task should increase the number of recommendation compared to the control group. The participants in this group were asked to imagine they are responsible for preparing a Warsaw culinary guide and they need to list the recommended places.
- participants in experimental group 2 were given a map of the central Warsaw. Their task was to make a virtual walk through the city centre,

recall the moments they really walked these streets, passed bars and restaurants. and then recommend places with good food.

Such task was designed to be close to the condition of playing "Our City" game, where players simulate walking the streets and reconstructing their customer journeys. We assumed that using the additional stimuli supporting the process of recollection will be more effective even that a gamified task but without any stimulation of the personal experience.

4.3. Results

One-way analysis of variance was used to analyse differences in average numbers of listed places between groups. The control group obtained the smallest average number of the recommended eating out places ($M = 4,21$; $SD = 1,95$). Experimental group 1 (contextual gamification) resulted in higher mean ($M = 7,00$; $SD = 2,79$), and the biggest average number of places was listed by experimental group 2 (virtual "Our City" walk; $M = 10,00$; $SD = 6,09$).

ANOVA revealed statistically significant difference, and high size of the effect: $F(2,37) = 12,99$; $p < 0,001$; $\eta^2 = 0,27$.

Significance of differences between particular groups was calculated with a post hoc test with Bonferroni correction. The outcome is presented on chart 1. The arrows mark statistical differences at $p < 0,05$ significance.

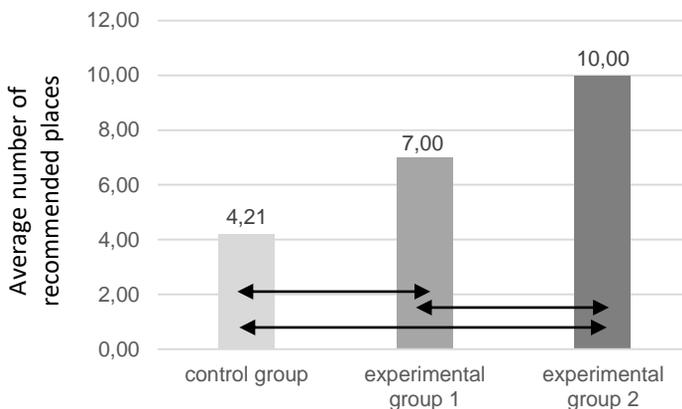


Figure 2. Differences in average number of listed eating out places

All the differences were statistically significant. Participants were the most effective in the condition with the visualization of the city and virtual walk. Also contextual gamification group was more productive than the control group.

4.4. Results discussion

The results support the hypothesis. The simulation of the real memorization process is the most effective tool to acquire information in the task dedicated to the recollection of the items from episodic memory. The experiment also proved the superiority of the contextual gamification over the control group, but only simulation of the mechanisms that underlies "Our City" game maximize the effect.

5. Conclusions

A growing demand of experience is observed on the Polish market – already one in three Poles (34%) claims that they would rather spend money on experiences than on material things (The Experience Advantage. 2019 Report Retail Banking, Kantar, 2019), the index is lower than seen in the western markets, which may imply that local interest in experience is likely to grow. Presumably then, the importance of experience marketing will increase as well, leading to development of research tools which may even better adjust to goals set for customer experience with various brands, being even more effective in blending different areas of brand activities.

"Our City" game is a tool which combines the benefits of two standard qualitative methodologies traditionally applied to map customer journeys – cognitive interviews and focus group interviews. On the one hand – similarly to cognitive interviews - it allows for in-depth understanding of individual customer journeys and identification of its key stages and touch points. It helps the game participants to reconstruct their processes in detail and focus on the experiences of strategic importance. At the same time, it stimulates respondents' interaction and group dynamics, which allows to include the elements which go

beyond customer journeys mapping and, for example, indicate how customer experience can be improved in order to better suit the current market needs. The effectiveness of "Our City" tool was confirmed in both the qualitative and the experimental approach.

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Understanding online and offline customer experience of shared vs. public mobility services – A semiautomated content analysis of user reviews

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Abstract:

Despite rising user rates for shared mobility services, huge potentials of the market remain untapped. Therefore, firms providing digital platforms for peer-to-peer or public mobility seek to expand their understanding of customer experiences (CX) for service improvements. Using semiautomated content analysis, this study investigates, if and how online user reviews can be used to better understand the online (app) and offline (travel) CX. Based on over 7,700 reviews of two archetypal providers from independent websites, we extracted key drivers of (dis-)satisfaction. Our study highlights the need to systematically analyze user feedback, since it reveals authentic and nuanced CX insights.

Keywords: *shared mobility, customer experience, user reviews*

1. Introduction

Due to technological advancements, interconnectivity between people is enhanced and many societies are moving from the traditional wisdom “you are what you own” to the new dictum “you are what you can access” (Belk, 2014, p. 1598f). This shift from ownership to sharing is illustrated by a sharp rise of sharing economy platforms, such as Airbnb as peer-to-peer (P2P) accommodation marketplace or Uber, representing a P2P ride sharing platform, which are both challenging established hotels and taxi businesses (e.g., Cramer & Krueger, 2016). A recent study showed, that 39% (21%) of Germans have used (offered) sharing economy services (Beutin, 2018). Related to car sharing, usage is growing at double-digit rates and within the next 5 years, the number of vehicles in car sharing fleets is expected to double (Briggs, 2018). Despite this growth, however, huge parts of the potential of sharing services remain untapped, both for P2P service platforms (e.g., BlaBlaCar) and Business to Consumer (B2C) service providers (e.g., Share Now). As such, it is highly important for these firms to understand key drivers of customer (dis-)satisfaction and, more generally, customer experience (CX) as determinants of service use.

So far, research in this field has mainly focused on differences for customers between owning and sharing (Bardhi & Eckhardt, 2017) and between P2P and B2C sharing options (Möhlmann, 2015). In general, studies focused either on shared mobility services (e.g., car sharing) or public mobility services (e.g., trains or buses). Our study aims to compare these two groups regarding CX and satisfaction. Furthermore, it is in particular difficult for the shared mobility firms to influence these experiences and the satisfaction levels directly, as consumers, instead of their own personnel, deliver the service (Eckhardt et al., 2019). Therefore, we evaluate what customers expect from the sharing economy firms regarding a constant and reliable service level. From a methodological point of view, we seek to examine, how customer reviews can be used for a comprehensive analysis of CX in the given context. Thus, we address the following research questions:

- RQ1: How do online reviews contribute to understanding the customer experience and satisfaction for shared mobility services?
- RQ2: What are the crucial elements of CX of shared versus public mobility services?
- RQ3: What do customers expect from shared mobility firms in terms of quality control and sanctioning?

To answer our research questions, we analyzed appr. 7,700 user reviews of a P2P mobility service (BlaBlaCar) and a public transport service (FlixBus) from three review sites. Using a semiautomated text analytics software (Caplena) for coding, we extracted key user experiences, quality perceptions and satisfaction ratings along the customer journey. We contribute both to literature on shared mobility services and digital marketing research, revealing that big volumes of online user reviews can be processed, analyzed and used for CX research with the help of an analytics software based on augmented intelligence. Key factors of CX in shared mobility could be extracted.

2. The Sharing Economy and the Changing Mobility Landscape

Although the concept of sharing economy is not new, a common definition is still lacking (Botsman, 2013) and terms such as “collaborative consumption”, “sharing economy” or “product service systems” are often used interchangeably (Belk, 2014, p. 1595). Collaborative

consumption can be described as an overarching concept, encompassing product service systems (e.g., temporary access to car sharing), collaborative lifestyles (such as sharing free space for accommodation on Airbnb) and redistribution markets, like eBay, to exchange underused products (Botsman & Rogers, 2011). According to Botsman (2013), the sharing economy is part of collaborative consumption. While some scholars are focusing on the sharing aspect, as "economic system in which assets or services are shared between private individuals" (Habibi, Kim and Laroche, 2016, p. 277), other researchers highlight that interactions could be "market mediated in which no transfer of ownership takes place." (Bardhi & Eckhardt, 2012, p. 881). Incorporating both aspects, and adding platforms, we follow Eckhardt et al. (2019, p. 7), defining sharing economy as "scalable socio-economic system that employs technology-enabled platforms to provide users with temporary access to tangible and intangible resources that may be crowdsourced". Due to these platforms, people with a demand for mobility and people who offer to share their resources, can find each other more easily and exchange goods or services.

Within the sharing economy, a distinction can be drawn between P2P markets and B2C markets. In P2P markets, consumers share resources, whereas, in B2C markets, companies provide the resources that are going to be shared by consumers (Behrendt, Henseling and Scholl, 2019). For example, P2P platforms, such as the ridesharing service provider BlaBlaCar, are in general only offering the match between people offering and requesting rides. In contrast, B2C offers, like the transportation service FlixBus, additionally include the provision of mobility services itself, such as the bus ride, seat and other amenities (Botsman, 2013). For both offers, the digital platform is a key part of the service delivery providing relevant information, payment processing and other key functions.

One of the largest segments within the field of the sharing economy is mobility. Related to car sharing, for example, "Share Now", as one major German car sharing service provider, now has over 4 million users (BMW, 2019). Massive traffic problems, limited space and high fees for parking in cities as well as pressing environmental issues like climate change have given momentum to new mobility concepts (e.g., Bardhi & Eckhardt, 2012). Furthermore, a shift of consumer's mentality can be observed which reinforces the ongoing positive trend of sharing (e.g., Eckhardt et al., 2019). Next to the rising demand, technological developments enabled new forms of sharing on a large scale, such as P2P platforms (Belk, 2014).

3. Customer Experience and Satisfaction in the Context of (Shared) Mobility Services

3.1 Concept and elements of the customer experience

Customer experience (CX) is a holistic construct that includes the entire experience with a firm and its offerings throughout the various touchpoints along the customer journey, from pre- to post-consumption stages (Verhoef et al., 2009). CX "encompasses every aspect of a firm's offering - the quality of customer care, of course, but also advertising, packaging, product and service features, ease of use, and reliability" (Meyer & Schwager, 2007, p. 118). It is not only affected by elements which can be controlled by the firm, but also by elements that are beyond the firm's control, such as the social environment in a service encounter (Verhoef et al., 2009).

In the case of (shared) mobility services, CX encompasses several online and offline touchpoints, i.e. the platform, interactions with firm employees as well as with private persons (co-travelers and private drivers in the case of ride-sharing) (e.g., Eckhardt et al., 2019; Möhlmann, 2015). Due to the nature of the mobility service and the service design

(platformmediation), digital touchpoints are dominant when planning and booking a trip, whereas tangible (e.g., the vehicles) and personal touchpoints (e.g., interactions with drivers) are significant elements of the actual travel experience. Therefore, multiple elements need to be identified that determine the overall CX, and thus, customer satisfaction.

3.2 Possible drivers of (dis)satisfaction with the service experience

In order to develop a categorization of crucial elements of the CX, we reviewed current research on customer satisfaction and experience, on service and app quality, and on shared (mobility) and public transport services. The resulting categorization was used as a theoretical foundation and initial framework for the coding process (see 4.2).

Customer satisfaction has been acknowledged as one of the key outcome variables of CX. As such, it can be defined as a “consumer’s post-purchase evaluation and affective response to the overall product or service experience” (Kungumapriya & Malarmathi 2018, p. 74). It can encompass single, as well as many experiences with a product or service and is often understood as the result of comparing customer expectations with actual delivered performance (Lemon & Verhoef, 2016). Churchill and Surprenant (1982) point to the attitudinal character of satisfaction, which is based on evaluations of different attributes of the product or service. Thus, satisfaction is influenced by a complex set of factors which include emotional and social factors next to cognitive evaluations (e.g., Fournier & Mick, 1999). Many of these potential factors can be identified within service quality research. Whereas satisfaction represents an overall evaluation, service quality is typically conceptualized as a multidimensional construct that drives customer satisfaction (Cronin & Taylor, 1992). With the advent of new technologies and the increased importance of digital channels, service quality in an electronic environment gained more research attention (e.g., Parasuraman, Zeithaml, and Malhotra, 2005). Even though service quality is mainly defined in functional and technical terms, it can comprise social and emotional aspects, such as the empathy of service staff and the social environment (Carreira, Patrício, Natal, and Magee, 2014).

We propose that potential drivers of customer satisfaction can be linked to quality perceptions of the platform, to the travel experience itself and to the customer service. First, since the platform is a key element of the business models in question, a thorough investigation of quality perceptions of the relevant digital platforms (i.e., apps and website), is needed. Second, the perceived quality of the travel experience itself will be investigated. We delineate travel experience as the ‘people processing’ part of the experience, which requires the consumer to actively enter the service system (i.e., traveling to the meeting point, waiting, entering the vehicle etc.). The travel experience is expected to represent a complex construct, including diverse factors such as punctuality, vehicle condition, information provision, offboard facilities, safety and many more (e.g., Mouwen, 2015). Third, in this study, customer service quality specifically refers to perceptions related to support provided by the staff of the firm outside the core travel experience, i.e. assistance provided by the support hotline. Moreover, we also expect to identify factors that affect the overall perception of and satisfaction with the mobility service, such as related costs and general attributes of the business and service concept, as opposed to single touchpoints. Specifically, sustainability has been put forward as a main consumer motive when using shared mobility services or public transport. Existing research, however, has provided conflicting results about the relevance of sustainability in the context of (shared) mobility services (e.g., Bardhi & Eckardt, 2012; Behrendt et al., 2019; Möhlmann, 2015).

Finally, it has also been noted that consumers might exhibit specific (lower?) expectations in the case of shared services – potentially influencing the formation of (dis)satisfaction. Since platform providers have less control over the service quality (esp. in P2P sharing), customers might be more willing to forgive service deficiencies, since the service providers are peers. Moreover, consumers might not regard private service providers as employees of the platform, and thus could be less likely to hold the platform accountable (Eckhardt et al., 2019). Thus, it is valuable to examine, what consumers expect from the sharing platform in terms of quality control, regulation and possibly sanctioning in case of service failures.

4. Method

Secondary data in the form of online customer reviews offers a rich source of information and gives insights into the drivers of customer satisfaction. An advantage when working with online customer reviews is the rather quick and non-obtrusive collection of a large volume of unbiased data. The open-ended format allows for detailed feedback and might lead to unexpected results (e.g., Kuckartz, 2016). Although the comments might not be reflective of the entire CX, they highlight elements that are outstanding and of concern to the customer (Cadotte & Turgeon, 1988). The structuring content analysis has been chosen as the research method in order to filter out aspects and topics from the material in a systematic and comprehensive way (Mayring, 2015; Kuckartz, 2016).

Traditionally, manual coding and structuring of plain text, meant a tremendous load of work. In our analysis, we employed the program Caplena, which supports the review coding based on augmented intelligence (Caplena, 2019a). Augmented intelligence is using Natural Language Processing technology, and can be understood as a sub-category of artificial intelligence. The augmented intelligence has been trained to comprehend misspellings, slang and the context-dependent meaning of homonyms (Caplena, 2019b). When coding the free text manually, the AI is steadily learning and is able to suggest codes after a certain number of manually coded reviews. If the proposed categorization by the AI shows a high accuracy rate, the categorization can be applied automatically. Caplena allows for the establishment of a category system with two hierarchy levels (main- and sub-categories).

As first step, review sites with a sufficient number of reviews on the companies were identified. Hereby, the review site had to be owned by a party independent of the reviewed firm and the reviews had to be publicly accessible (Yang & Fang, 2004). The app store Google Play was chosen, offering the highest volume of accessible reviews for this study (Google Play, 2020). Additionally, the international review sites Utopia and Trustpilot were selected (Utopia, 2020; Trustpilot, 2020). We inspected 10,000 reviews from Google Play, 5,000 for each firm. We excluded hoax reviews and unrelated comments. In total, 3,227 reviews for BlaBlaCar and 3,418 reviews regarding FlixBus were coded. Additionally, 393 (77) FlixBus (BlaBlaCar) reviews from Trustpilot (Utopia) were categorized, adding up to over 7,700 customer comments.

The next step was the a priori determination of the main thematic categories in line with the research questions and the literature review. Therefore, the main thematic categories included elements of CX and drivers of customer (dis-)satisfaction for FlixBus and BlaBlaCar (RQ 2). Then, factors regarding quality control and sanctioning expectations were included (RQ 3). CX was further divided into app/platform, travel experience and customer service quality, costs and overall concept. A preliminary category system was compiled based on the literature review (deductive approach). In an iterative process, the category system was

steadily revised and new sub-categories were established. Comprehensive coding guidelines were developed including definitions of the (sub-)categories, key examples and coding rules.¹ The codes were differentiated by the polarities “negative” and “positive”, to account for satisfying and dissatisfying (quality) perceptions and experiences. We included also the star ratings, filtering the 4-5 and 1-2 star ratings as indicator of (dis-)satisfaction. Thereby, we considered that star ratings on Google Play referred to the app/platform, whereas Trustpilot and Utopia have a broader scope.

5 Results

The most frequently cited category in the reviews was the app/platform quality serving for 76% (72%) of the BlaBlaCar (FlixBus) reviews. However, despite this obvious focus on the app due to the high amount of reviews from Google Play, the reviews also contained a considerable amount of comments on the non-app-related CX. Costs were mentioned in 27% of the BlaBlaCar reviews, followed by the travel experience (18%), the overall concept (13%) and the customer service quality (1%). Regarding FlixBus, the travel experience was cited in 30% of the reviews, followed by the costs (9%) and the service quality (5%).

Source		Drivers of satisfaction (+)			
BlaBlaCar	Google Play	General app quality (34%) - PQ	Ease of use (20%) - PQ	Technical functioning (17%) - PQ	Fare (14%) - C
	Utopia	Social environment (44%) - TXQ	Fare (34%) (costs)	Rating system (34%) - PQ	Direct contact (31%) - PQ
FlixBus	Google Play	Ease of use (42%) - PQ	Technical functioning (16%) - PQ	General app quality (14%) - PQ	Fare (10%) - C
	Trust-Pilot	Driver behavior (55%) - TXQ	On-board amenities (39%) - TXQ	Punctuality (33%) - TXQ	Fare (33%) - C
Source		Drivers of dissatisfaction (-)			
BlaBlaCar	Google Play	Usage package/ service fee (60%) - C	Technical functioning (34%) - PQ	Request/removal of a feature (11%) - PQ	Cancellation by driver (5%) - TXQ
	Utopia	Usage package/ service fee (67%) - C	Moderated content (49%) - PQ	Choice of payment methods (38%) - PQ	Prevention of direct contact (28%) - PQ
FlixBus	Google Play	Technical functioning (34%) - PQ	Punctuality (10%) - TXQ	Request/removal of a feature (14%) - PQ	Ease of Use (12%) - PQ
	Trust-Pilot	Driver behavior (58%) - TXQ	Punctuality (34%) - TXQ	Compensation (28%) - CSQ	Responsiveness (22%) - CSQ

Keys: PQ: Platform quality, C: Costs, CSQ: Customer Service quality, TXQ: Travel experience quality

Table 1: Key drivers of customer (dis-)satisfaction

Concerning the drivers of satisfaction with the app (see Table 1), the ease of use was found to be the most frequently cited determinant for both companies, followed by the technical functioning of the app. Apart from the app, the cheap fare was a crucial factor for satisfaction for both companies. Moreover, positive driver behavior was identified as a determinant of satisfaction for FlixBus in both the Google Play and the Trustpilot reviews. The social environment was a frequently mentioned satisfier for BlaBlaCar in both the Google Play and Utopia reviews. The rating system was valued by the BlaBlaCar customers, since it establishes trust. In order to clarify details about the ride, direct contact with the driver prior to booking the ride was important to the users.

¹ The complete codebook including exemplary reviews can be provided on request.

Analyzing the drivers of dissatisfaction with the app (Table 1), the findings for both companies coincided: technical functioning of the app was the most often-cited sub-category in the Google Play reviews, followed by the request or removal of an app feature and the ease of use. Apart from the app, delays and the poor provision of information were determinants of dissatisfaction for FlixBus. As for BlaBlaCar, the usage package/service fee was the most frequently cited negative factor in both the Google Play and Utopia reviews, indicating a high influence on dissatisfaction. Furthermore, cancellations by BlaBlaCar drivers contributed to customer dissatisfaction.

When comparing the drivers of satisfaction and dissatisfaction for BlaBlaCar and FlixBus and disregarding distinctions that stem from the different offers of the companies, three main differences stood out. The positive social environment was a frequently mentioned driver of satisfaction for BlaBlaCar (esp. on Utopia), while it was only mentioned in 0.2% of the total FlixBus reviews from Google Play. This can likely be traced back to the confined space and a perception of a rather private service in the cars, or the platform rating system. On top of that, sustainability was cited in 0.1% (3.6%) of the total FlixBus (BlaBlaCar) reviews from Google Play. Despite the low percentage of comments, the difference indicates that sustainability is more likely to be a relevant factor when using shared mobility services, as opposed to public transport. The higher number of mentions regarding the driver behavior and punctuality as satisfiers and dissatisfiers in the FlixBus reviews could be an indicator that BlaBlaCar users have lower expectations regarding the professionalism of the driver, since the providers are peers.

The results regarding quality control and sanctioning (RQ 3) indicate that the consumers expect protection against misdemeanors of the service providers from BlaBlaCar as platform owner. Passengers wished for more protection against the cancellation of rides, nonappearances or rejections of requests by the drivers in 0,7% of the reviews. 35% of these comments contained the suggestion that drivers should be held accountable and penalized for these actions, e.g. by the introduction of cancellation fees. Interestingly, although it is expected that BlaBlaCar punishes the misbehavior of the drivers, other interferences are not desired, which is shown by the negative mentions regarding the moderation of all content exchanged by the users through BlaBlaCar and the prevention of direct contact between the driver and passenger in the Utopia reviews (see Table 1).

6. Discussion

Our study contributes to theory and management in several ways. First, the study reveals, that content analysis of customer review data from open-access sites yields relevant insights on CX and satisfaction. The analysis of large volumes of unstructured qualitative data is a rather new research opportunity, which offers high external validity and authentic customer data. These large datasets, as ours with over 7,700 coded user reviews, have the potential to create robust results and represent a broad customer base. As most surveys offer rather limited information beyond the preselected topics, review data can be used for a more nuanced understanding of the consumer perspective. For example, reviews containing topics of particular interest could be selected by a specific code and then re-assessed to get in-depth insights. Moreover, reviews in broad categories could be re-coded more granularly for new insight structures. Second, the study sheds light on possibilities to integrate artificial or augmented intelligence into new research routines and processes. Both business and research can utilize software tools like Caplena to be able to process and handle data more time- and cost-efficiently. Third, our research identifies differences as well as similarities between the

crucial elements of customer experience for public and shared mobility companies. The fare is a driver of satisfaction for both FlixBus and BlaBlaCar customers and also the relevance of (dis)satisfying app quality dimensions coincided. The main differences consist in the higher number of mentions regarding the social environment and sustainability as drivers of satisfaction for BlaBlaCar. Still, functional quality dimensions and cost-related aspects seem to dominate the CX and satisfaction – not only when traveling with public transport, but also when using a P2P mobility service.

From a practical point of view, several recommended actions can directly be derived from this research. First, managers could indeed use customer review sites and draw upon huge amounts of customer feedback to improve their services. Investments in AI-supported analytics software should prove valuable. Although obviously customers focus on reviewing the app on an app-centered website or app store (Google Play), a significant amount of comments regarding customer travel experience, costs or alike can still be derived. Especially in the absence of other information sources, this data should not be neglected. As such, this method represents a non-obtrusive way of customer feedback collection. Consumer reactions to app updates or other service changes, e.g. of the pricing structure, can be observed and analyzed immediately. Our results suggest, for example, that marketing strategies for P2P ride sharing should emphasize the star ratings and direct contact options build up trust, plus social and environmental benefits, whereas FlixBus as B2C service should focus on classical service dimensions, such as positive driver behavior, reliable services, transparent and on-time travel information and on-board amenities. Still a crucial foundation of both types of services is a stable and easy-to-use platform and a fair and transparent pricing scheme.

As all research, this study comes with some limitations. First, the dataset might not be representative, as Yi (1990) suggests, that customers with extreme experiences might be most likely to leave reviews. On top of that, the influence of the review site on the content of the reviews has to be considered, as well as the relatively small number of coded comments from Trustpilot (393) and Utopia (77), in particular. Hence, further research methods should be employed to gain a broader perspective, especially on the travel experience. This rather exploratory study might serve as a basis for further research, which could validate the findings with standardized and representative quantitative research methods. As valid for most new software, additional features (e.g., ex-post deletion of comments) would enhance the coding and data purification. Furthermore, as for many AI tools, irony, figurative speech and slang were hardly interpreted correctly. However, the rapid development of natural language processing will probably soon lead to higher levels of accuracy. Finally, investigating a broader range of P2P and B2C sharing offers from other industries or countries would further enhance knowledge in this domain.

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Value Co-creation and Co-destruction Behaviour: Relationship with Basic Human Values

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Abstract:

Whilst co-destruction and co-creation are both likely outcomes of interactions between firms and consumers, co-destruction has not been studied as extensively as co-creation. This work attempts to bridge this gap by highlighting value types likely to facilitate consumer co-destruction behaviour and how they compare to value types likely to facilitate consumer co-creation behaviour. We find that personal values which express self-enhancement and openness-to-change facilitate co-destruction behaviour, while personal values which express self-transcendence and conservation facilitate co-creation behaviour. The results also suggest that the basic human values circumplex structure can be divided beyond the current division into those previously suggested to reflect co-creation and co-destruction values.

Keywords: *service-dominant logic, co-destruction, values, behaviour, value destruction, co-creation*

1. Introduction

Co-creation occurs when both the firm and consumer have congruent expectations of how resources should be integrated during interactions (Plé and Cáceres, 2010). Both parties therefore exhibit behaviours expected to facilitate resource integration. Co-destruction occurs when there is incongruence or discrepancies in the way resources are integrated during interactions (Plé and Cáceres, 2010). In this case, neither party exhibits the expected set of behaviours or they exhibit adverse behaviours. When firms make value propositions, firms expect consumers to behave in certain ways for value to be co-created. Failure of consumers to exhibit such behaviours will result in mis-integration of resources. This undermines the wellbeing of the service system, ultimately leading to value co-destruction (Plé and Cáceres, 2010). Anticipating and setting up processes to deal with such adverse behaviours is necessary, if firms are to ensure creation of value.

Anticipating potential consumer behaviours during interaction is not possible without understanding the determinants of behaviour. Values have been identified as important determinants of behaviour and consumers typically behave in ways that express their values (Bardi and Schwartz, 2003). This makes understanding values and their relation to behaviour crucial, if firms are to understand consumer co-destruction behaviours. The compatibilities and conflicts between value types show a grouping into value types which show a concern for oneself versus a concern for others and an embrace of change versus a resistance to change (Schwartz, 1992). This makes values ideal for understanding the co-creation/co-destruction behaviours. Since most behaviours can express more than one value (Bardi and Schwartz, 2003), this paper focuses on identifying which groups of values will facilitate value co-destruction and which group will facilitate value co-creation. Specifically, this paper seeks to answer two research questions, firstly "*which value dimensions are more likely to facilitate value co-destruction behaviour?*" and secondly "*how do these compare to the value dimensions that are likely to facilitate value co-creation?*". The findings can be beneficial to firms when they develop consumer touch points, by providing a means to anticipate likely behaviours.

2. Literature Review and Hypothesis Development

2.1. Consumer Behaviour and Co-creation/ Co-destruction

Understanding consumer behaviour during interactions is important to facilitate the achievement of organisational goals (Daunt and Harris, 2012). The literature identifies at least two types of customer behaviour in service delivery. The first is customer participation behaviour, which refers to all the required (in-role) behaviours expected of consumers

necessary for the successful delivery of service (Groth, 2005). The second is customer citizenship behaviour, which refers to voluntary (extra-role) behaviours not necessarily required for service delivery, but, when performed by consumers generate extra value for the firm (Groth, 2005). Research has shown that both customer participation and citizenship behaviours influence customer and firm outcomes, such as customer satisfaction and firm performance respectively (Ennew and Binks, 1999, Skaggs and Youndt, 2004). Whilst both participation and citizenship behaviours facilitate co-creation, consumers who choose not to exhibit these behaviours or exhibit other adverse behaviours will destroy value for the firm. Just like co-creation, consumers can exhibit customer detrimental behaviour, which refers to customer in-role co-destructive behaviour and customer impropriety behaviours, which refers to customer extra-role co-destructive behaviour (Table 1).

Table 1: Co-creation and co-destruction dimensions

Co-creation		Co-destruction	
Participation	Information Seeking	Detrimental	Ignoring Information
	Information Sharing		Withholding Information
	Responsible Behaviour		Irresponsible Behaviour
	Personal Interaction		Impersonal Interaction
Citizenship	Feedback	Impropriety	Negative Feedback
	Advocacy		Opposition
	Helping		Neglecting
	Tolerance		Intolerance

2.2. Basic Human Values

Values are desirable intermediate goals, varying in importance, and which serve as guiding principles in people's lives (Schwartz, 2007). Values influence the selection or evaluation of policies, actions and events; values thereby influence consumer decisions. The influence of values on behaviour has been acknowledged by various authors (Carman, 1978, Schopphoven, 1991). People and actions in pursuit of any value have psychological, practical and social effects, which could be congruent or conflicting with the pursuit of other values. Consequently, during interactions, individuals are likely to act based on their values in value creating or destroying encounters. Ten sets of basic values were proposed by Schwartz (2007), (Table 2). The conflicts and congruities between the Schwartz (1992) values yielded four higher value types, which form two basic, bipolar, conceptual dimensions.

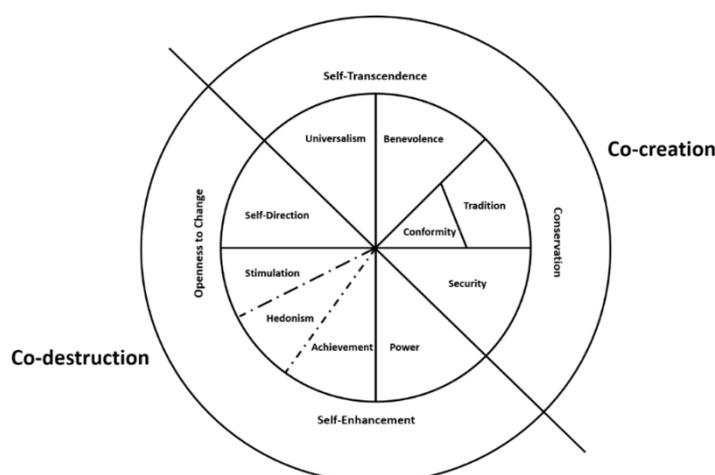
Table 2: Higher order value dimensions and 10 sets of basic human values (Schwartz, 2007)

Higher Order Dimensions	Value Types	Motivational Goal
Openness to Change Values Values which motivate people to follow their own intellectual and emotional interests and	Self-Direction	independent thought and action
	Stimulation	excitement, novelty, and challenge in life
	Hedonism	pleasure or sensuous gratification for oneself
Conservation Values	Conformity	restraints of actions and impulses likely to harm or upset others and violate social expectations or norms
	Tradition	acceptance of customs

Values which motivate people to preserve the status quo and associated certainty	Security	harmony and stability of society
Self-Enhancement Values Values which motivate people to enhance their own personal interests	Achievement	personal success through demonstrating competence
	Power	control or dominance over people and resources
	Hedonism	pleasure or sensuous gratification for oneself
Self-Transcendence Values Values which motivate people to promote the welfare of others	Universalism	tolerance and protection of all people
	Benevolence	preserving and enhancing the welfare of those with whom one is in frequent contact

The motivational nature of these values and conflicts indicate that grouping both self-enhancement and openness to change values together (SE+O) mirrors co-destruction behaviour and grouping self-transcendence and conservation (ST+C) together mirrors co-creation behaviour. A divide can thus be drawn on the Schwartz (1992) circumplex model to reflect values more likely to serve co-creation, and values on opposing sides which are likely to serve co-destruction (Figure 1).

Figure 1: Relationship between basic human values and co-creation/co-destruction behaviour



SE+O higher order values are values which motivate people to follow their own intellectual and emotional interests and enhance their own personal interests (Schwartz, 1992). Self-enhancement values include power, achievement and hedonism, while openness to change values include stimulation and self-direction. These values are likely to facilitate mis-integration of resources during interactions between firms and consumers. Customers who exhibit these values are therefore more likely to co-destroy value, considering the motivational goals served by these values relate more to behaviours expected during co-destruction. Both, when combined, will show stronger correlation and prediction of co-destruction dimensions in comparison to ST+C values. We therefore propose that:

H1: *Self-enhancement and openness to change values will show a stronger positive relationship and effect on co-destruction detrimental and impropriety dimensions in comparison to self-transcendence and conservation values when value is being co-destroyed.*

ST+C higher order values are values which motivate people to preserve the status quo and promote the welfare of others (Schwartz, 1992). Self-transcendence values include both universalism and benevolence, while conservation values include security, conformity and tradition. These value types are likely to facilitate the integration of resources during firm/consumer interactions. Customers who subscribe to these values are therefore more likely to co-create value, considering that the motivational goals served by these values relate more to behaviours expected during co-creation. Both, when combined, will show stronger prediction of co-creation dimensions in comparison to SE+O values. We therefore posit:

***H2:** Self-transcendence and conservation values will show a stronger positive relationship and effect on co-creation participation and citizenship dimensions in comparison to self-enhancement and openness to change values when value is being co-created.*

3. Methodology

3.1. Data Collection, Sampling & Questionnaire

Data was collected using a U.S. online consumer panel. A total of 390 respondents answered the questionnaire. The sample showed substantial variance on key demographic characteristics: Gender 209 females and 181 males (53.6% and 46.4% respectively); Age (<39 = 26.2%), (40-59 = 36.9%) and (>60 = 36.9%); Income (<\$24,999 = 24.9%), (\$25,000-\$49,999 = 33.1%), (\$50,000-\$74,999 = 14.9%), (\$75,000-\$99,999 = 11.5%) and (>\$100,000 = 15.6%).

Basic human values were measured using The Short Schwartz's Value Survey (SSVS) (Lindeman and Verkasalo, 2005). The SSVS requires individuals to rate the importance of the 10 values directly. This was done on a 9-point scale. Scores for ST+C values and similarly for SE+O were calculated by averaging the scores of their respective value types. Alpha coefficients were calculated for ST+C values (.802) and SE+O values (.912).

To measure co-destruction, participants were asked to think of a time when they had a negative experience with a firm's product, service or employee and felt justified to take negative actions towards the firm. For co-creation, they were asked to think of a time when they had a positive experience with a firm's product, service or employee and felt justified to take positive actions towards the firm. The respondents were then asked questions with regards to these instances (Table 4). Co-creation and Co-destruction were measured with items adopted from Yi and Gong (2013)'s co-creation scale. This scale conceptualises co-creation as a third order dimension with both the consumer participation behaviour and consumer citizenship behaviour as second order dimensions, each consisting of 4 third order

dimensions. Co-creation items were utilised directly as stated by the scale. A negative alternative to the co-creation items was used to measure co-destruction. Participants rated their degree of agreement with the issues on a 7-point Likert scale with responses ranging from “extremely unlikely” to “extremely likely.” Co-destruction and co-creation dimension scores were calculated by taking the average of items measuring each dimension.

Table 4: Co-destruction & co-creation scale items & alpha coefficients - adopted from (Yi & Gong, 2013)

Co-destruction		Co-creation	
Measurement Item	α	Measurement Item	α
Co-destruction Detrimental		Co-creation Participation	
Ignoring Information I intentionally withheld information from others on what this service offers. I intentionally have not searched for information on where this service is located. I intentionally ignored paying attention to how others behave in order to use this service well.	0.910	Information Seeking I have asked others for information on what this service offers. I have searched for information on where this service is located. I have paid attention to how others behave to use this service well.	0.863
Withholding Information I intentionally did not clearly explain what I wanted the employee to do. I intentionally withheld important information from the employee. I intentionally provided unnecessary or did not provide all the information necessary and the employee could not perform his or her duties. I did not answer all the employee's service-related questions.	0.972	Information Sharing I clearly explained what I wanted the employee to do. I gave the employee proper information. I provided necessary information so that the employee could perform his or her duties. I answered all the employee's service-related questions.	0.936
Irresponsible Behaviour I intentionally performed only a few or none of the tasks that were required. I inadequately completed all the expected behaviours intentionally. I intentionally did not fulfil my responsibilities to the business. Intentionally, I did not follow the employee's directives or orders.	0.978	Responsible Behaviour I performed all the tasks that were required. I adequately completed all the expected behaviours. I fulfilled my responsibilities to the business. I followed the employee's directives or orders.	0.964
Impersonal Interaction I was not friendly to the employee intentionally. I was unkind to the employee intentionally. I was impolite to the employee intentionally. I was discourteous to the employee intentionally. I intentionally acted rudely to the employee.	0.979	Personal Interaction I was friendly to the employee. I was kind to the employee. I was polite to the employee. I was courteous to the employee. I didn't act rudely to the employee.	0.967
Co-destruction Impropriety		Co-creation Citizenship	
Negative Feedback If I have a useful idea on how to improve service, I intentionally don't let the employee know. Even when I receive good service from the employee, I intentionally complain about it. When I experience a problem, I intentionally don't let the employee know.	0.926	Feedback If I have a useful idea on how to improve service, I let the employee know. When I receive good service from the employee, I comment about it. When I experience a problem, I let the employee know about it.	0.896
Opposition I intentionally said negative things about this firm and the employee to others. I intentionally dissuade others from this firm and the employee. I intentionally discourage my friends and relatives from using this firm.	0.924	Advocacy I said positive things about this firm and the employee to others. I recommended this firm and the employee to others. I encouraged my friends and relatives to use this firm.	0.939
Neglecting	0.959	Helping	0.950

I intentionally snub/hinder other customers if they need my help. I intentionally don't help other customers if they seem to have problems. I intentionally teach other customers to use the service incorrectly. I intentionally give incorrect advice to other customers.		I assist other customers if they need my help. I help other customers if they seem to have problems. I teach other customers to use the service correctly. I give advice to other customers.	
Intolerance If service is not delivered as expected, I would not be willing to put up with it. If the employee makes a mistake during service delivery, I would not be willing to be patient. If I have to wait longer than I normally expected to receive the service, I would not be willing to adapt.	0.850	Tolerance If service is not delivered as expected, I would be willing to put up with it. If the employee makes a mistake during service delivery, I would be willing to be patient. If I have to wait longer than I normally expected to receive the service, I would be willing to adapt.	0.782

3.2. Analysis

Following data collection and calculation of variables, we computed correlations between the value scores and the co-creation and co-destruction dimensions. We also performed a series of regression analysis. The SE+O values score and also the ST+C values score were the independent variables, while the co-creation and co-destruction dimensions were the dependent variables. Regression analysis was used instead of structural equation modelling (SEM) to evaluate the effects due to the way the basic values were measured. SSVS requires individuals to rate the importance of the 10 values directly, therefore only one item was used to measure each value.

4. Results

When value is being co-destroyed, we hypothesised that there would be stronger positive relationships and effects between SE+O values and co-destruction impropriety and co-destruction detrimental dimensions in comparison to ST+C values. This can be seen in Table 5 and 6 below, where all dimensions of value co-destruction (detrimental and impropriety) showed stronger positive correlations to SE+O values in comparison to ST+C values.

Table 5: Correlations between co-destruction dimensions and SE+O & ST+C values.

Dimensions	SE+O	ST+C
Co-destruction Detrimental		
Ignoring Information	.370**	.026
Withholding Information	.354**	-.082
Irresponsible Behaviour	.339**	-.081
Impersonal Interaction	.342**	-.075
Co-destruction Impropriety		
Negative Feedback	.328**	-.067
Opposition	.308**	.077
Neglecting	.344**	-.064
Intolerance	.300**	.083

Table 6: Regression results - co-destruction

Dimension	Values	β	t	p	b	SE	CI	R^2
Co-destruction Detrimental							Lower	Upper

Ignoring Information	Constant		8.692	0.000	2.472	0.284	1.912	3.031	.186
	SE+OC	.523	9.401	.000	0.487	0.052	0.385	0.589	
	ST+C	-.270	-4.857	.000	-0.244	0.050	-0.343	-0.145	
Withholding Information	Constant		8.559	0.000	2.497	0.292	1.924	3.071	.243
	SE+OC	.590	10.996	.000	0.584	0.053	0.480	0.689	
	ST+C	-.416	-7.760	.000	-0.400	0.052	-0.501	-0.298	
Irresponsible Behaviour	Constant		8.313	0.000	2.494	0.300	1.904	3.084	.224
	SE+OC	.566	10.423	.000	0.570	0.055	0.462	0.677	
	ST+C	-.402	-7.394	.000	-0.392	0.053	-0.496	-0.288	
Impersonal Interaction	Constant		8.263	0.000	2.497	0.302	1.903	3.091	.223
	SE+OC	.566	10.403	.000	0.573	0.055	0.464	0.681	
	ST+C	-.395	-7.263	.000	-0.388	0.053	-0.492	-0.283	
Co-destruction Impropriety									
Negative Feedback	Constant		8.577	0.000	2.538	0.296	1.957	3.120	.202
	SE+OC	.539	9.780	.000	0.527	0.054	0.421	0.633	
	ST+C	-.372	-6.756	.000	-0.353	0.052	-0.456	-0.250	
Opposition	Constant		7.912	0.000	2.519	0.318	1.893	3.145	.109
	SE+OC	.389	6.689	.000	0.388	0.058	0.274	0.502	
	ST+C	-.144	-2.468	.014	-0.139	0.056	-0.249	-0.028	
Neglecting	Constant		8.372	0.000	2.453	0.293	1.877	3.029	.217
	SE+OC	.559	10.244	.000	0.547	0.053	0.442	0.652	
	ST+C	-.381	-6.972	.000	-0.361	0.052	-0.462	-0.259	
Intolerance	Constant		9.502	0.000	2.707	0.285	2.147	3.267	.101
	SE+OC	.372	6.364	.000	0.330	0.052	0.228	0.432	
	ST+C	-.127	-2.180	.030	-0.110	0.050	-0.209	-0.011	

We also hypothesised that the relationship and effect between ST+C values and co-creation citizenship and co-creation participation dimensions would be positive and stronger in comparison to SE+O values when value is being co-created. This can be seen in Table 7 and 8 below, where all dimensions of value co-creation (participation and citizenship but not information seeking, helping and tolerance) showed stronger positive correlations and effect on ST+C values in comparison to SE+O values.

Table 7: Correlations between co-creation dimensions and SE+O & ST+C values.

Dimensions	SE+O	ST+C
Co-creation Participation		
Information Seeking	.450**	.349**
Information Sharing	.360**	.533**
Responsible Behaviour	.354**	.542**
Personal Interaction	.289**	.571**
Co-creation Citizenship		
Feedback	.425**	.565**
Advocacy	.399**	.551**
Helping	.447**	.377**
Tolerance	.444**	.404**

Table 8: Regression results - co-creation

Dimension	Values	β	t	p	b	SE	CI		R^2
Co-creation Participation							Lower	Upper	
Information Seeking	Constant		9.610	0.000	2.276	0.237	1.810	2.741	.216
	SE+OC	.372	6.809	.000	0.294	0.043	0.209	0.378	
	ST+C	.139	2.542	.011	0.106	0.042	0.024	0.188	
Information Sharing	Constant		11.481	0.000	2.510	0.219	2.080	2.939	.289
	SE+OC	.085	1.639	.102	0.065	0.040	-0.013	0.144	
	ST+C	.485	9.330	.000	0.360	0.039	0.284	0.436	

Responsible Behaviour	Constant		11.456	0.000	2.520	0.220	2.087	2.952	.297
	SE+OC	.070	1.347	.179	0.054	0.040	-0.025	0.133	
	ST+C	.502	9.705	.000	0.377	0.039	0.301	0.453	
Personal Interaction	Constant		12.593	0.000	2.761	0.219	2.330	3.192	.328
	SE+OC	-.051	-1.014	.311	-0.040	0.040	-0.119	0.038	
	ST+C	.600	11.866	.000	0.459	0.039	0.383	0.535	
Co-creation Citizenship									
Feedback	Constant		10.001	0.000	2.142	0.214	1.721	2.563	.336
	SE+OC	.154	3.071	.002	0.120	0.039	0.043	0.197	
	ST+C	.478	9.504	.000	0.359	0.038	0.285	0.434	
Advocacy	Constant		10.559	0.000	2.317	0.219	1.886	2.749	.315
	SE+OC	.128	2.512	.012	0.100	0.040	0.022	0.179	
	ST+C	.478	9.363	.000	0.363	0.039	0.287	0.439	
Helping	Constant		8.651	0.000	2.168	0.251	1.675	2.661	.222
	SE+OC	.343	6.312	.000	0.288	0.046	0.198	0.378	
	ST+C	.183	3.363	.001	0.149	0.044	0.062	0.236	
Tolerance	Constant		12.166	0.000	2.485	0.204	2.083	2.887	.231
	SE+OC	.316	5.845	.000	0.217	0.037	0.144	0.291	
	ST+C	.225	4.160	.000	0.150	0.036	0.079	0.221	

5. Discussion

This study sought to contribute to the literature by identifying groups of values which are likely to facilitate value co-destruction and how these values compare to those which facilitate co-creation. The results offer evidence of relationships between value co-destruction/ co-creation behaviour and groups of values. Self-enhancement and openness to change higher order values (SE+O) when grouped together better correlate and show a greater effect on impropriety and detrimental dimensions of co-destruction in comparison to self-transcendence and conservation higher order values (ST+O). People who exhibit self-enhancement values tend to focus more on their own self and well-being as opposed to those of others around them. People who exhibit openness-to-change values are willing to try new things out and are usually in need of constant stimulation (Schwartz, 1992). The higher correlation and effect of co-destruction impropriety and detrimental dimensions show that these values, when exhibited, are more likely to facilitate value co-destruction. Individuals with these values are less likely to share information, act responsibly during interactions, ultimately leading to weaker personal interactions with firms. The results also show self-transcendence and conservation higher order values when grouped together better correlate and show a greater effect on citizenship and participation dimensions of co-creation in comparison to self-enhancement and openness to change higher order values. Self-transcendence values are values which emphasise the acceptance of others and the concern for their welfare before one's own self, while conservation values are values which emphasise the preservation of traditional practices, self-restriction and the protection of stability (Schwartz, 1992). The higher correlation and effect of co-creation citizenship and participation dimensions show that

these values, when exhibited, are more likely to facilitate value co-creation. Individuals with these values are more likely to share information and act responsibly during interactions, ultimately leading to better personal interactions with firms.

6. Conclusion

Co-destruction and co-creation of value are both likely outcomes of interactions between firms and consumers. Whilst firms have behaviours expected of consumers during and beyond interactions to ensure the successful co-creation of value (Yi and Gong, 2013), consumers could exhibit adverse behaviours which result in value co-destruction. This study has found self-enhancement and openness to change value types both show higher prediction and correlation with co-destruction behaviour in comparison to self-transcendence and conservation value types. Consumers with a higher number of both self-enhancement and openness to change value types are therefore more likely to destroy value during interactions. This study also finds self-transcendence and conservation value types show higher prediction and correlation with co-creation behaviour in comparison to self-enhancement and openness to change value types. Individuals with a higher number of self-transcendence and conservation value types are more likely to co-create during interactions.

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An empirical investigation into the influence of Emotional Intelligence on Consumer Behavior

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Abstract:

Two surveys used self-reported scales to investigate a) the main effects of Emotional Intelligence (henceforth EI) on impulsive and ethical consumption, and b) the mediating role of the self-regulatory focus (i.e. prevention/promotion). Survey 1 indicates that EI reduces impulsive consumption. Survey 2 suggests that EI reduces impulsive and elevates ethical consumption. It has also been shown that the prevention and the promotion focus mediate the relationship between EI and ethical consumption. The findings allow us to make an important theoretical and empirical contribution by presenting the first research that brings together these key features that have been under-researched.

Keywords: *EI, impulsive consumption, ethical consumption*

1. Introduction and theoretical underpinnings

Over the last two decades, an increasing body of consumer behavior literature has focused on the key construct of individuals' EI. From a psychological perspective, Mayer and Salovey (1990) introduced the notion of EI and described it as a skill set reflecting humans' ability to recognize, express, and regulate emotions in the self and others (Mayer and Salovey, 1990). In the domain of consumer behavior, EI enhances behavioral intentions, improves decision-making quality, and amplifies customer satisfaction. Such outcomes are accomplished through individuals' ability to perceive, facilitate, understand and effectively manage emotional information (Kidwell, Hardesty, and Childers, 2007; Kidwell, Hardesty, and Childers, 2008; Kidwell, Hardesty, Murtha, and Sheng, 2011; Gabbott, Tsarenko, and Mok, 2011; Kidwell, Hasford, and Hardesty, 2015).

Emotional ability training may regulate such irrational habits as impulsive consumption (Kidwell et al., 2007; Kidwell et al., 2008; Kidwell et al., 2015). Impulsive consumption reflects an unplanned behavior occurring after a frivolous decision-making process and subjective bias in support of a reflexive acquisition (Kacen and Lee, 2002). Emotional ability training counteracts impulsive consumption by helping people effectively use emotional cues to accomplish an ideal consumption outcome through goal-relevant emotional thoughts. These thoughts assist emotionally intelligent individuals in cognitively recognizing which emotions are favorable for a quality decision, and how these emotions can be combined into the decision-making process to refine wellness. A prime example is that emotionally intelligent individuals avoid high-calorie intake and prefer a healthier diet (Kidwell et al., 2007; Kidwell et al., 2008; Kidwell et al., 2015). The above findings are important as the depletion of self-control can positively influence the unplanned consumption because individuals have restricted cognitive resources to effectively cope with the tempting stimuli (Baumeister, 2002; Strack and Deutsch, 2006; Tsukayama and Duckworth, 2012).

Consumer research suggests that not only EI, but also the self-regulatory focus (i.e. promotion/prevention) affects impulsive consumption (Florack, Friese, and Scarabis, 2010; Sengupta and Zou, 2007). This occurs since the self-regulatory focus influences the way that individuals interpret and react to various situations. According to the regulatory focus theory, two distinct cognitive mechanisms guide individuals' thoughts and reactions: promotion and prevention. A promotion focus is founded on situational or chronic aspirations and motivates individuals to adopt a heuristic way of thinking. A prevention focus is founded on situational or chronic responsibilities and motivates individuals to adopt an analytical way of thinking. Consequently, these cognitive processes set off different strategies for goal attainment. Individuals driven by promotion focus goals tend to pursue strategies that maximize pleasure and lead to positive outcomes. Individuals driven by prevention focus goals tend to pursue strategies that minimize pain and ensure protection from negative outcomes (Higgins, 1997; Higgins, 2002; Aaker and Lee, 2001; Arnold and Reynolds, 2012; Dholakia, Gopinath, Bagozzi, and Natarajan, 2006; Chitturi, Raghunathan, and Mahajan, 2007; Chitturi, Raghunathan, and Mahajan, 2013). As a result, compared to promotion-focused individuals, prevention-focused individuals are less likely to approach unplanned consumption. In this vein, the promotion focus boosts impulsive consumption whereas the prevention focus reduces impulsive consumption (Florack et al., 2010; Sengupta and Zou, 2007).

Parallel to impulsive consumption, the self-regulatory focus is also associated with ethical consumption (De Bock and Van Kenhove, 2010; Monin, Pizarro, and Beer, 2007). As discussed previously, there is a rife agreement in the literature that individuals aiming to achieve their goals adopt either promotion or prevention-focus partners (Higgins, 1997;

Higgins, 2002; Aaker and Lee, 2001; Arnold and Reynolds, 2012; Dholakia, Gopinath, Bagozzi, and Natarajan, 2006; Chitturi, Raghunathan, and Mahajan, 2007; Chitturi, Raghunathan, and Mahajan, 2013). The promotion focus is positively related to unethical consumption, as individuals are motivated to follow their personal goals irrespective of the consequences. The prevention focus is positively related to ethical consumption as individuals follow established norms and duties in any consumption context. Accordingly, while the promotion focus undercuts ethical consumer practices through the arousal of positive hedonic emotion of pleasure, the prevention focus facilitates ethical consumer practices through the arousal of negative self-conscious emotion of shame (De Bock and Van Kenhove, 2010; Monin et al., 2007). In any case, ego-control (i.e. the regulation of arousal emotions) becomes a major issue in the consumer ethics domain because it positively affects ethical behavior (Eisenberg, 2000; Monin et al., 2007). Individuals embed self-control in order to behave morally when confronting obstacles and eschew behaving unfairly when facing a temptation with respect to the binding values of authority, loyalty, and purity (Mooijman et al., 2017). Since the emotion regulation is a defining attribute of EI (Kidwell et al., 2007; Kidwell et al., 2008; Kidwell et al., 2015), it is implied that EI may drive high levels of ethical consumption. Extending the findings in marketing exchanges, individuals who control their emotions, can improve their moral-self by interpreting ethical consumption as a search for a meaning in life. The morality of actions then is associated with the acceptance or rejection of brands and other consumption practices in brand communities that reflect consumer normative beliefs (Coskuner-Balli, 2013).

2. Conceptualization and hypotheses

While EI, consumer ethics, impulsive behavior, and the self-regulatory focus are independently important, to our best knowledge there is a lacuna of empirically-based knowledge regarding their combinatorial role in consumer behavior. The present research proposes that a) EI affects impulsive and ethical consumption, and b) the effects of EI on impulsive and ethical consumption are mediated by the promotion (prevention) focus. Figures 1a and 1b illustrate the proposed associations.

Drawing on the above theoretical and literature background, our two central hypotheses posit that EI exerts a negative and a positive main effect on impulsive and on ethical consumption respectively (e.g. De Bock and Van Kenhove, 2010; Kidwell et al., 2007; Kidwell et al., 2008; Kidwell et al., 2015). But we also propose that such effects are filtered through the two components of the regulatory focus theory, namely promotion, and prevention (e.g. Higgins, 2002). In particular, EI should a) foster a prevention focus (i.e. a focus that reduces impulsive consumption and enables ethical consumption) and b) cause a departure from a promotion focus (i.e. a focus that drives impulsive consumption and adversely affects ethical consumption). More formally:

H1. EI has a negative effect on impulsive consumption.

H2. The total negative effect of EI on impulsive consumption is mediated by a) a prevention focus and b) a promotion focus.

H3. EI has a positive effect on ethical consumption.

H4. The total positive effect of EI on ethical consumption is mediated by a) a prevention focus and b) a promotion focus.

Finally, previous research indicates that consumer demographics shape impulsive consumption and ethical consumption (Brackett, Rivers, Shiffman, Lerner, and Salovey, 2006; Joseph and Newman, 2010; Kacen and Lee, 2002; Kidwell et al., 2011; Mayer, Salovey, and Caruso, 2004; Mooijman et al., 2017; Vitell and Paolillo, 2003). Therefore, on top of the above main-and mediating-effect associations, our conceptualization controls for age, gender and income

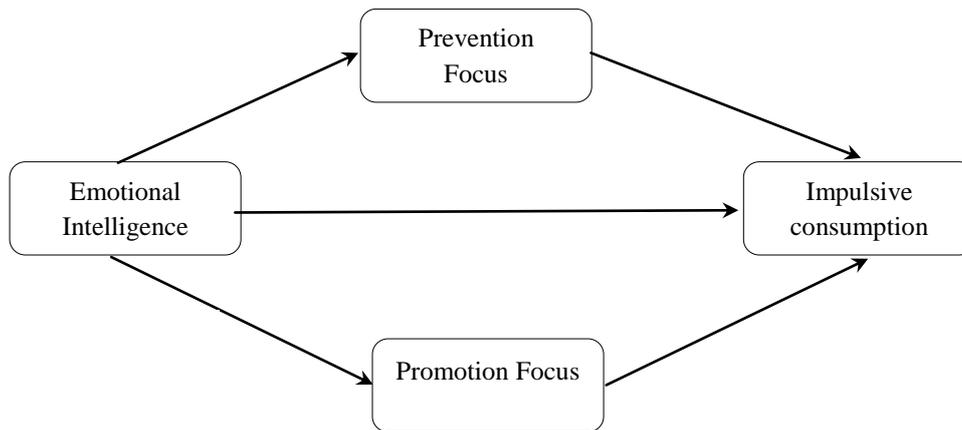


Figure 1a. EI and impulsive consumption

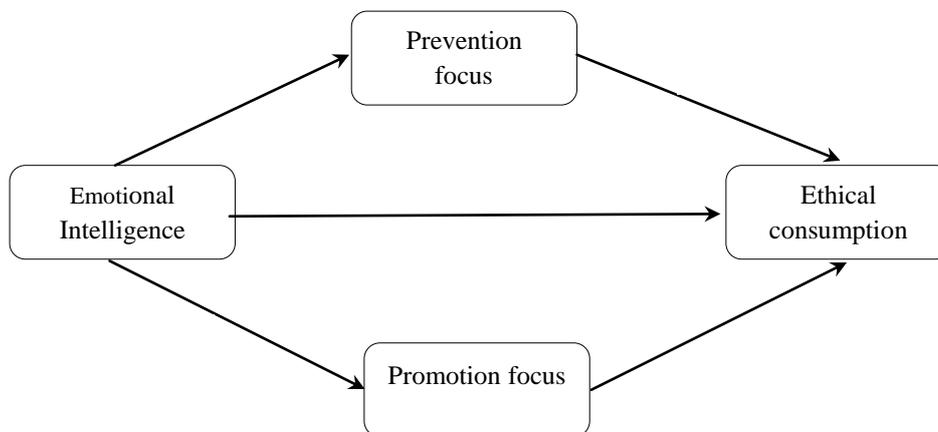


Figure 1b. EI and ethical consumption

3. Data analysis

3.1. Survey 1

Survey 1 tested the main effects of EI on impulsive and ethical consumption (i.e. H1 and H3).

Two hundred undergraduate and postgraduate students at the Athens University of Economics and Business participated in the survey (56.5% female). The mean age was 28.7 ($SD = 6.7$). Participants were first asked to complete an EI scale. Once they had answered, participants rated the extent to which they engage in impulsive consumption. They then indicated their

attitude toward ethical consumption terms. Finally, respondents filled out their age, gender, and income.

EI was measured using the 19-item Self-Related EI Scale (SREIS) (Brackett et al., 2006) ($\alpha = 0.757$). Impulsive consumption was assessed using the 9-item Self-Related Buying Impulsiveness Scale (BIS) (Rook and Fisher, 1995) ($\alpha = 0.931$). Ethical consumption was operationalized using the 31-item Self-Related Consumer Ethics Scale (CES) (Vitell and Muncy, 2005) ($\alpha = 0.866$). All measures used a 7-point Likert scale with endpoints labeled 1 (strongly disagree) and 7 (strongly agree).

Separate linear regression analyses were conducted with EI as the independent variable and impulsive and ethical consumption as the dependent variables. The statistical results indicated that the effect of EI on impulsive consumption had the expected negative sign but did not reach significance ($\beta = -0.06$, $t = -0.89$, $p > 0.05$). Therefore, H1 was not supported. But in line with H3, EI had a positive and significant effect on ethical consumption ($\beta = 0.23$, $t = 3.25$, $p = 0.01$). Table 1 shows the results. The association between EI and ethical consumption held after controlling for age, gender, and income.

Model	β	t
Constant		5.496
Total EI	0.225	3.253*

Note: Dependent Variable: Total_EthicScale

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Table 1. Regression analysis for EI and Ethical Consumption

3.2. Survey 2

Survey 2 aimed at a) re-testing the effects of EI on the two outcome variables (i.e. H1 and H3) and b) addressing the mediating roles of a prevention/promotion focus (i.e. H2 and H4).

A total of two hundred and forty undergraduate and postgraduate students at the Athens University of Economics and Business participated in the study (51.7% female). The mean age was 25.6 ($SD = 6.75$). Participants were first asked to indicate their agreement/disagreement with an EI scale. They then answered several questions designed to assess prevention and promotion focus respectively. Afterwards, participants filled out an impulsive consumption scale, followed by an ethical consumption scale. At the end of the survey, respondents completed the demographic characteristics described in survey 1.

To measure EI, impulsive, and ethical consumption, we employed the same constructs as in survey 1. Specifically, we operationalized EI using the 19-item Self-Related EI Scale (SREIS) (Brackett et al., 2006) ($\alpha = 0.890$), tested impulsive consumption using the 9-item Self-Related Buying Impulsiveness Scale (BIS) (Rook and Fisher, 1995) ($\alpha = 0.970$), and assessed ethical consumption with the 31-item Self-Related Consumer Ethics Scale (CES) (Vitell and Muncy, 2005) ($\alpha = 0.860$). We also operationalized prevention focus using the 7-item Behavioral Inhibition System (BIS) scale (Carver and White, 1994) ($\alpha = 0.826$) and promotion focus using the 13-item Behavioral Activation System (BAS) scale (Carver and

White, 1994) ($\alpha = 0.886$). All items were responded on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree).

Similar to survey 1, recurrent linear regression analyses were conducted with EI as the independent variable and impulsive and ethical consumption as the dependent variables. In line with H1, EI had a negative and significant effect on impulsive consumption ($\beta = -0.273$, $t = -4.380$, $p < 0.001$) (Table 2). The predicted effect remained significant even when age, gender, and income were controlled. Table 2 presents the results.

Model	β	t
Constant		5.496
Total EI	-0.273	-4.380***

Note: Dependent Variable: Totalimpulsive

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Table 2. Regression analysis for EI and Impulsive Consumption

The statistical results also provided support for H3. EI had a positive and significant effect on ethical consumption ($\beta = 0.481$, $t = 8.466$, $p < 0.001$) (Table 3). The direct effect of EI on ethical consumption existed even when controlling for age, gender, and income.

Model	β	t
Constant		5.496
Total EI	0.481	8.466***

Note: Dependent Variable: TotalEthics

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

Table 3. Regression analysis for EI and Ethical Consumption

Furthermore, to test the mediating roles of a prevention vs. a promotion focus, we followed the steps suggested by Hayes (2017). Specifically, for each of the two main effects of figures 1 and 2, we estimated separate mediation models with EI as the independent variable, impulsive and ethical consumption as the outcome variables (one at a time) and prevention/promotion as the mediators (one at a time). In each mediation model, we observed the significance of the total effect, of the effect of the independent variable on the mediator, of the effect of the mediator on the outcome variable controlling for the independent variable and of the independent-to-outcome variable mediation pathway with a confidence interval that excludes zero (indirect effect). Using the PROCESS model 4 (Hayes, 2017) we found that the indirect effect of EI on impulsive consumption through a prevention focus was negative ($a = 0.188$, $b = -0.095$, $a \times b = -0.018$) but the corresponding 95% confidence interval included zero (95% CI [-0.075, 0.037]). As such, the predicted mediation effect of the prevention focus on the relationship between EI and impulsive consumption was not supported (H2a). Table 4 demonstrates the results.

DV: Impulsive consumption (IC)ⁱ				
Variable	B	SE	t	p
Effect of EI on the prevention focus	0.188	0.003	5.566	0.000***
Effect of the prevention focus on IC	-0.095	0.142	-0.671	0.503
	Effect	SE	L95%CI	U95%CI
Total effect of EI on IC	-0.298	0.073	-0.443	-0.154
Indirect effect of EI on IC	-0.018	0.028	-0.075	0.037

Table 4. The mediating effect of the prevention focus on EI-impulsive consumption association

In addition, as depicted in Table 5, the indirect effect of EI on impulsive consumption through a promotion focus was negative ($a = 0.367$, $b = -0.014$, $a \times b = -0.005$), with a confidence interval that included zero (95% CI [-0.075, 0.055]). Therefore, the promotion focus did not mediate the relationship between EI and impulsive consumption. H2b was rejected.

DV: Impulsive consumption (IC)ⁱⁱ				
Variable	B	SE	t	p
Effect of EI on the promotion focus	0.367	0.065	5.603	0.000***
Effect of the promotion focus on IC	-0.014	0.087	-0.164	0.869
	Effect	SE	L95%CI	U95%CI
Total effect of EI on IC	-0.183	0.086	-0.354	-0.013
Indirect effect of EI on IC	-0.005	0.032	-0.075	0.055

Table 5. The mediating effect of the promotion focus on EI-impulsive consumption association

The statistical analysis also showed that EI had a positive indirect effect on ethical consumption through the prevention focus ($a = 0.188$, $b = 0.502$, $a \times b = 0.094$) with a 95% confidence interval that excluded zero (95% CI [0.039, 0.175]). Consistent with H4a, the prevention focus partially mediated the relationship between EI and ethical consumption. The significance of the effects remained after controlling for age, gender, and income. Table 6 illustrates the results.

DV: Ethical consumption (EC)ⁱⁱⁱ				
Variable	B	SE	t	p
Effect of EI on the prevention focus	0.188	0.003	5.566	0.000***
Effect of the prevention focus on EC	0.502	0.128	3.911	0.001**
	Effect	SE	L95%CI	U95%CI
Total effect of EI on EC	0.568	0.068	0.432	0.702
Indirect effect of EI on EC	0.094	0.035	0.039	0.175

Table 6. The mediating effect of the prevention focus on EI-ethical consumption association

Finally, the results indicated that the promotion focus partially mediated the relationship between EI and ethical consumption. Specifically, EI had a negative indirect effect on ethical

^{iii ii} Note: Unstandardized regression coefficients reported. Bootstrap sample size 5000. L = lower limit; U = upper limit; CI = confidence interval. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

consumption ($a = 0.367$, $b = -0.331$, $a \times b = -0.121$) that the 95% confidence interval denoted it is statistically significant excluding zero (95% CI [-0.235, -0.028]). H4b was accepted. All these associations held after controlling for age, gender, and income. Table 7 presents the results.

DV: Ethical consumption (EC)^{iv}				
Variable	B	SE	t	p
Effect of EI on the promotion focus	0.367	0.065	5.603	0.000***
Effect of the promotion focus on EC	-0.331	0.131	-2.521	0.012*
	Effect	SE	L95%CI	U95%CI
Total effect of EI on EC	0.628	0.133	0.366	0.890
Indirect effect of EI on EC	-0.121	0.052	-0.235	-0.028

Table 7. The mediating effect of the promotion focus on EI-ethical consumption association

4. Discussion and concluding remarks

Despite the fact that the results reported here did not support all the hypotheses that we proposed, we believe that the statistically significant associations make a useful addition to an understanding of the extent to which individuals' cognition, emotions, and values influence consumption decisions. First, EI reduces impulsive consumption (Survey 2) and boosts ethical consumption (Surveys 1 and 2). These associations are in line with our reasoning and the corresponding theoretical underpinnings. Second, the effects of EI on ethical consumption are driven by the prevention and the promotion focus. Of primary interest was the fact that the indirect effect of EI on ethical consumption through the prevention focus was positive. On the contrary, the indirect effect of EI on ethical consumption through the promotion focus was negative (Survey 2). The findings concerning the mediating role of the two components of the self-regulatory theory (i.e. prevention and promotion focus) suggest that there exists promising room for further investigation into the boundary conditions that determine the power of EI to cause certain consumption behaviors. As this study progresses, we will enrich the conceptual framework presented here and we will complement the empirical legs with additional primary data.

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^{iv} Note: Unstandardized regression coefficients reported. Bootstrap sample size 5000. L = lower limit; U = upper limit; CI = confidence interval. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

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Overcoming consumption barriers for conscious food products: The relevance of measures encouraging individual sensory imagery

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Abstract:

The present paper focuses on combating lay theory-based consumption barriers towards conscious food products. We draw on literature on sensory imagery, the availability-valence hypothesis and Grice's Theory of Conversational Implicature and report an experimental study, involving sensory testing, storytelling, and VR technology, investigating the effects of vividness of sensory imagery on consumers' behavioral intentions. The experimental study (n = 160) was conceptualized as a mixed design study. Results provide first empirical evidence for the fact that stimulating individual imagery by storytelling can be more efficient in reducing consumption barriers than the use of VR technology or verbal sensory product descriptions.

Keywords: *conscious consumption, sustainable consumption, consumption barriers*

1 Conscious consumption – concepts and challenges

The tremendous increase in consumers' consumption of goods and services over the last decade came along with severe damages to the environment, such as increased environmental pollution, global warming, a decline in flora and fauna, and a depletion of natural resources (Chen & Chai, 2010). This realization and the accompanying concern towards the society and environment favored the emergence of concepts of social / behavioral change and conscious consumption, bringing forth the idea of consumers who take into account the public consequences of their private consumption or who attempt to use their purchasing power to affect in social change (Webster, 1975).

Individualistic concepts of social change base upon individual attitudes and values and strive after behavioral changes through changes of consciousness. The corresponding transformation narrative is that "...many small changes in individual actions will add up to bigger changes in overall resource consumption" (Watson, 2017), whereby the needed rethinking is not only about individual consumption decisions or given needs that are to be "sustainably" satisfied, but the social production of demand and the creation of needs and infrastructures (Goulden et al., 2014).

Because of this development, concepts such as sustainable development, eco innovation, and green consumption attracted attention of practitioners and scholars. The concept of sustainable development bases upon the desire to satisfy the needs of the present without risking that future generations might not be able to fulfill their needs (Hauff, 1987) and "emphasizes the need to promote sustainability and advocates that form of development which minimizes negative impact on the environment and society" (Joshi & Rahman, 2015). The concept of eco innovation refers to the incorporation of sustainability practices in all stages of the creation of goods and services (Veleva & Ellenbecker, 2001). Green consumption is understood as environmentally responsible consumption, with consumers considering the environmental impact of purchasing, consuming and disposing products or services (Moisander, 2007).

After comprehensive reviews of existing literature, scholars conclude that there is a lack of knowledge about the reasoning and justifications about conscious consumption behavior, particularly, why consumers would or would not act consciously in certain consumption situations (Belk, Devinney, and Eckhardt, 2005). Moreover, they emphasize that "what is particularly apparent is the extent of disconnect between the issues consumers claim to care about when surveyed and their purchasing behavior" (Belk et al. 2005).

Indeed, the idea of conscious consumption and accompanying concepts and trends entail major challenges arising at the interface between product development, marketing, consumer science and sensory science, as several barriers towards purchase and consumption of conscious products exist. While factors such as low availability, high prices and the lack of consumer trust in the respective products have been in the focus of scientific attention and are regarded as major barriers towards purchase of such products (Joshi & Rahman, 2015), another explanatory approach for prevailing consumption barriers refers to the existence of so-called lay theories, attributing, for instance, lower sensory pleasure and lower effectiveness to conscious products.

Moreover, existing literature criticizes that the concentration on conscious consumption often let us forget that it is the non-demonstrative routine consumption, that can be associated with high environmental consumption (Goulden et al., 2014). Resting upon this consideration, the importance of actions addressing healthy and environmentally friendly food behaviors is increasingly recognized, though researchers state that "it is not yet clear which

actions are most suitable to support consumers to adopt both behaviours concurrently” (Hoek, Pearson, James, Lawrence, and Friel, 2017).

Against this background, the present paper focuses on understanding and combating lay theory-based consumption barriers towards conscious food products as examples for non-demonstrative routine consumption. Due to the prevalent lack of consistency in the various terminologies and definitions that have been offered about the different components of conscious consumption (Roux & Nantel, 2009), the work at hand focuses on three sub-aspects of conscious consumption, namely purchase behaviors for *climate-friendly*, *organic* and *regional* food products.

2 Barriers towards conscious food consumption: the role of sensory appeal

Though up to 65% of consumers report intentions to buy purpose-driven brands that advocate sustainability, only about 26% do so (White, Hardisty, and Habib, 2019). While several factors potentially representing consumption barriers have already received scientific attention, only little work focuses on the role of the perceived sensory appeal of conscious products in forming or removing consumption barriers and existing studies come to contradictory conclusions.

It is acknowledged that consumers tend to categorize products as either healthy or unhealthy based on the products’ attributes (Rozin, Ashmore, and Markwith, 1996). What makes this tendency worthy of note in the context of conscious consumption is that consumers tend to associate sustainability with higher perceived health (Verain, Sijtsema, and Antonides, 2016). This expected positive correlation between health and sustainability might be because consumers “often encounter health and sustainability together in products” (Cho & Baskin, 2018). Literature instances the example of vegetarian meals, which are considered to be, both, healthy and sustainable, as compared to non-vegetarian meals, which are generally assumed to be unhealthy and unsustainable (Kareklas, Carlson, and Muehling, 2014).

In the same vein as sustainable food items, also organic and regional food is associated with higher healthiness than conventional food by remarkable percentages of consumers. Studies show that up to 87 % of consumers perceive organic food to be healthier than conventional food, and 75 % believe that organic food is more sustainable than conventional food (Petrescu & Petrescu-Mag, 2015). Similarly, regional food, i.e. food growing in the surrounding region, is believed to be healthier, fresher, and more sustainable than conventional food (Darby, Batte, Ernst, and Roe, 2006; Henseleit, Kubitzki, and Teuber, 2007).

Empirical work proposes that if consumers encounter different product attributes together over time, the associations between them may become automatic, such that, if provided with one attribute, consumers may automatically predict a positive correlation on the other attribute (Bargh & Chartrand, 1999), thereby often reinforcing consumers' own biases (Cho & Baskin, 2018). Following this train of thought, consumers’ strong association of climate-friendly, organic, and regional food products with healthiness may entail opportunities, but also barriers towards the consumption of conscious food products:

On the one hand, some studies provide reason to assume that, for instance, organic production may be associated with better taste, and that only if taste expectations are not met, this might raise potential barriers to consumers’ repurchase intentions (Grunert, Bredahl, and Brunsø, 2004). Similarly, scholars suggest that consuming green (vs. conventional) products

should result in increased enjoyment of the accompanying consumption experience. The proposed effect is referred to as the green consumption effect (Tezer & Bodur, 2019).

However, the strong association of climate-friendly, organic, and regional products with healthiness is acknowledged to be linked to the sensory perception of these products, thereby potentially impairing their inferred sensory qualities, and reducing their enjoyment during actual consumption (Raghunathan, Naylor, and Hoyer, 2006). While counterexamples exist (see, for instance, Huang & Wu, 2016, Mai & Hoffmann, 2015), it is still widely unclear which factors may be supportive or hindering for the perception of conscious products as sensory appealing and enjoyable.

Thus, the present research elaborates on how “consuming well” (in the sense of climate-friendly, organic, regional) and sensory pleasure can become more interconnected rather than being perceived as distinct constructs (Huang & Wu, 2016).

3 Sensory information and the role of sensory imagery

Sustainability may still be regarded as an abstract concept to many consumers (Grunert, Hieke, and Wills, 2014); moreover, healthy and environmentally friendly food behaviours are considered less convenient than conventional routines, as they require physical and mental effort to change current habits (Brunner, Van der Horst, and Siegrist, 2010). Thus, respective literature calls for “different interventions geared to break dietary habits” (Hoek et al. 2017) and emphasizes that “efforts to change habitual behaviours will have more impact if they include changes in the situational food buying and consumption context, as these are shown to be most effective” (Hoek et al. 2017; Van't Riet, Sijtsema, Dagevos, and De Bruijn, 2011). Moreover, scholars agree that the “translation of [...] behavioural principles into consumer-friendly communication messages needs to be specified and researched further” (Hoek et al. 2017; Michie, van Stralen, & West, 2011).

It is acknowledged, that sensory properties play a vital role with regards to product choice; however, they are intrinsic attributes and as such they may not be assessed prior to purchase. Consequently, consumers lack reliable information about the sensory product experience during the stage of purchase, wherefore extrinsic cues (i.e., cues that are not part of the product itself) guide product selection (Hoppert et al., 2014). Product attributes furthermore appeared as major drivers for conscious purchase decisions in existing literature (Joshi & Rahman, 2015). Moreover, not only expectations, but also sensory perception may be affected by information, however, the effects of externally supplied information on perception have been widely under-researched (Krishna, 2012).

In literature, however, it remains unclear whether and how the provision of sensory information (i.e., information about sensory product attributes) and the evocation of sensory imagery may assist in reducing consumption barriers for conscious products. While some studies point to the risk of communicating sensory information by stating that “even if it fails at changing the expected benefits of consumption, marketing communication can influence the importance of these benefits, for example, by making taste a more important goal than health” (Chandon & Wansink, 2012), other publications highlight that “focusing on sensory pleasure can make people happier and willing to spend more for less food, a triple win for public health, consumers and businesses alike” (Cornil & Chandon, 2016). However, sensory pleasure is underused to promote conscious eating behaviors, wherefore only little is known about the potential of sensory pleasure-oriented messages (Trudel-Guy et al., 2019) in the context of conscious consumption.

Building on the availability-valence hypothesis, the vividness of sensory information should be crucial in affecting attitudinal judgments, as the vividness of information presented in a message influences the extent to which people will engage in cognitive elaboration (Kisielius & Sternthal, 1986). Moreover, "evoking a vivid image produces a life-like activity of 'seeing', 'hearing', 'tasting', 'smelling', 'touching' or feeling something; mental imagery is a [...] process that resembles, but is not identical to, perception with action" (Marks, 2019). Imagery refers to the process of developing a mental representation of persons, objects, situations or feelings and encourages the stimulation and use of various senses (Heyn, 2003). Against the background that imagery and activity are produced by similar neural processes in the brain, we consider imagery a concept with high potential relevance to conscious consumption. Indeed, existing research shows that imagery can serve as a key element in current food induction and, as such, determine the intensity of food cravings (Tiggemann & Kemp, 2006).

Resting upon these considerations and the few contradictory findings, we draw on literature on imagery and the availability-valence hypothesis and suggest that sensory information, particularly if presented in ways encouraging vivid imagery, will assist in the reduction of consumption barriers for conscious (climate-friendly, organic and regional) food products. Thus, we put forward the following hypotheses:

H1: Stimulating sensory imagery may affect consumers' pre- and post-consumption responses as well as behavioral intentions towards conscious (climate-friendly, organic, regional) food products.

H2: Higher *vividness* of the evoked sensory imagery will result in more favorable consumer responses, while decreases in vividness will reduce this positive effect.

Despite of the importance of imagery, literature provides reason to assume that it might be advantageous to employ unspecific rather than very specific stimuli in order to evoke imagery. One theory supporting this assumption is *Grice's Theory of Conversational Implicature* (Grice, 1975), basically suggesting that that if marketing messages are not sufficiently informative, consumers tend to make additional, positive attributions about the product in question and, resultantly, evaluate this product more favorable, whereas if messages are considered sufficiently informative, no reasons to form additional, positive attributions would exist (Miller & Kahn, 2005). Consequently, measures leaving space for individual attributions (e.g., "storytelling", that is, a verbal description of a situation or context) might have a more favorable impact than measures triggering rather concrete images (e.g., a visual depiction of a situation or context). Storytelling would represent such a measure, as it encourages individual imagery and evokes the stimulation and use of the senses (Heyn, 2003). Building thereupon, we propose that,

H3: Measures encouraging *individual* imagery by providing *unspecific* stimuli (storytelling, i.e., verbal description of a situation or context) will result in more favorable consumer responses than measures guiding imagery to a higher extent by providing *concrete* stimuli (visual depiction of a situation or context).

4 Empirical work

4.1 Study design

To test our hypotheses, we conduct an experimental study ($n = 160$) in the sensory lab of a Central European University. The experiment is conceptualized as a mixed design study, whereby the *degree of stimulated sensory imagery* (control group without stimulation vs.

verbally presented sensory information vs. individual sensory images generated by storytelling vs. vivid sensory images created by VR technology) serves as between-subjects factor and the *type of conscious product* (climate-friendly vs. organic vs. regional) as within-subjects factor. Consumer responses before (sensory expectations, expected liking, expected health impact, pre-consumption behavioral intentions) and after tasting (sensory perception, perceived liking, post-consumption behavioral intentions) serve as dependent measures.

Verbally presented sensory information communicates the crispy texture and fruity apple flavor of the stimuli.

As visual images tend to be experienced as most vivid compared to other sensory modalities (Schifferstein, 2008), vividness of sensory imagery is manipulated using VR technology: Two HTC Vive Pro Eye devices are employed to communicate sensory information in the "vivid sensory imagery" condition. The Plymouth Sensory Imagery Questionnaire (Andrade, May, Deeprouse, Baugh, and Ganis, 2013) is used to assess the subjective degree of vividness of mental imagery.

Individual sensory images are created by storytelling, i.e., verbally describing a situation in a natural environment that is based on the same image that is also used for the group using VR technology.

Unstructured line scales with extreme-point-descriptions were used to collect data (0-10).

4.2 *Selection of product category and stimuli*

As unprocessed food products are subject to various interactions with the environment during their growth, harvest, and storage, wherefore their properties and quality characteristics change over time (Tscheuschner, 1996), thus impairing their experimental comparability, we decide on a processed food product, namely corn sticks with apple flavor of the brand "Rosenfellner Mühle". The choice of this concrete product bases upon several considerations: Corn sticks may easily be portioned and served for sensory testing, do neither represent an extreme example for sensory pleasure nor healthiness, and may be labeled either as a climate-friendly, organic, or regional product.

4.3 *Procedure*

160 voluntary and untrained students and visitors of the university took part in the four test groups mentioned in the sensory tests.

During the sensory tests, each of the 160 test subjects in the four test groups were given three times (climate-friendly vs. organic vs. regional labelling, whereby these three conditions were arranged in a random order for each respondent) three samples of the corn sticks. Additionally, the participants were provided with a glass of water to neutralize their taste. The control group was only informed in advance that they would receive three variants of a product for assessment (climate-friendly, regional and organic). EG 2 was also informed about the crispy texture and fruity apple taste of the product. EG 3 was provided with a 360° picture via VR technology for 30 seconds before the tasting, which showed the environment of close to nature agriculture. The same picture was described to EG 4 in the form of storytelling, and the test subjects were asked to empathize with the picture for 30 seconds.

Respondents were then instructed to systematically assess the samples based on their expectations (sensory expectations, expected liking, expected health impact, pre-consumption

behavioral intentions), followed by sensory tasting and a further assessment of their perception (sensory perception, perceived liking, post-consumption behavioral intentions).

The ratings given by the test persons were transferred to Microsoft Office Excel and evaluated with XLStat®.

4.4 Analysis

The study was analysed with various ANOVA's and Benjamini-Hochberg post-hoc-test, whereby the *degree of stimulated sensory imagery* (control group without stimulation vs. verbally presented sensory information vs. individual sensory imagery evoked by storytelling vs. vivid sensory imagery evoked by VR technology) serves as between-subjects factor and the *type of conscious product* (climate-friendly vs. organic vs. regional) as within-subjects factor.

4.5 Results

Our results indicate that stimulating sensory imagery can affect consumers' pre- and post-consumption responses as well as behavioral intentions towards conscious (climate-friendly, organic, regional) food products and therewith support in the reduction of consumption barriers for suchlike products. However, it is the encouragement of *individual* imagery rather than the evocation of particularly *vivid* imagery through VR technology or the evocation of *concrete* sensory imagery through the provision of sensory descriptions which is decisive for the success of these measures.

The encouragement of individual imagery by storytelling (i.e., verbally describing a context which could be experienced with multiple senses) has the strongest positive effect on product expectations, as it significantly enhances sensory expectations for, both, the product with organic ($F(3,158) = 2.708, p = .047$, Benjamini-Hochberg $p = .015$) and regional label ($F(3,158) = 3.163, p = .026$, Benjamini-Hochberg $p = .002$), as compared to the evocation of vivid imagery through the virtual experience of the same context via VR technology.

Partly, this effect persists even after tasting, as reflected, for instance, by significant positive effects of storytelling on texture perceptions for organic products ($F(3,158) = 3.121, p = .028$; Benjamini-Hochberg $p = .018$).

Figures 1-3 exemplarily illustrate the results of some characteristics that revealed significant differences between the storytelling and VR group for the stimulus with "organic" label.

Interestingly, and as can be seen from the figures, both, the provision of sensory descriptions and the VR condition even resulted in a slight deterioration of consumer responses, whereas the encouragement of individual imagery through storytelling had a consistent positive impact on our success variables.

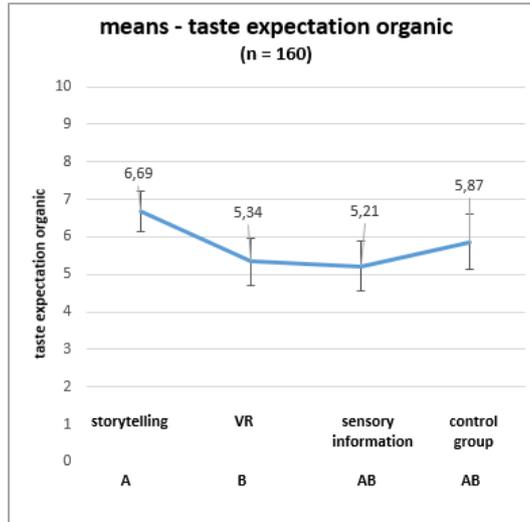


Figure 1: means – taste expectation organic

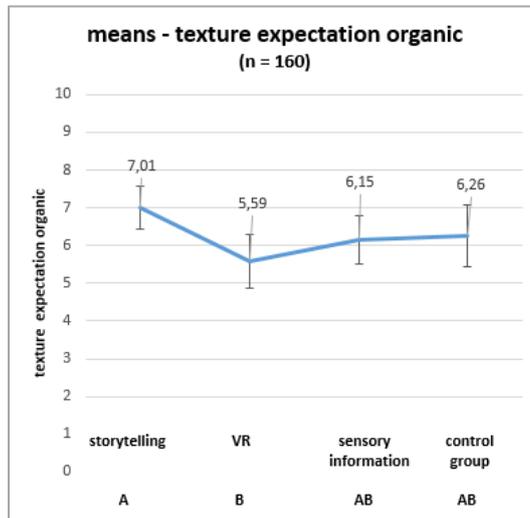


Figure 2: means – texture expectation organic

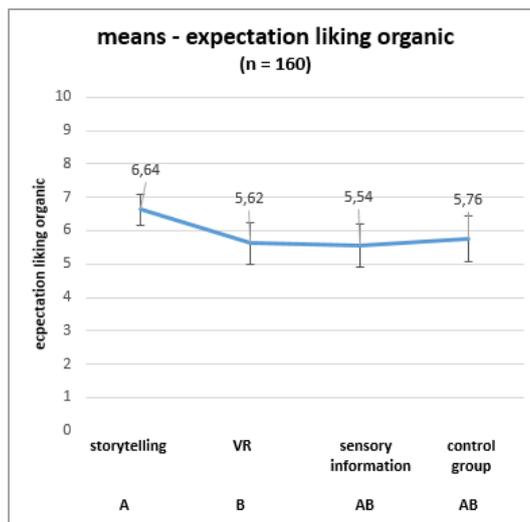


Figure 3: means – expectation liking organic

5 Conclusion

The present research, located at the interface between marketing, sensory science and VR, aims to contribute to this young research field by investigating how messages evoking vivid sensory imagery can assist in the reduction of consumption barriers for conscious (climate-friendly, organic and regional) food products.

Our results indicate that is the encouragement of *individual* imagery rather than the evocation of particularly *vivid* imagery, can be effective in enhancing sensory expectations and, therewith, reducing consumption barriers for conscious products.

Despite of the pioneer character of our study, we consider this a highly interesting finding in times where many efforts are put into the creation of ideally lifelike, virtual simulations of the real world. Though acknowledging the potential of these simulations in manifold areas, our research suggests that encouraging individual imagery by providing rather unspecific stimuli (storytelling, i.e., verbal description of a situation or context) may significantly reduce consumption barriers for conscious products, while guiding imagery to a higher extent by providing concrete stimuli (virtual depiction of a situation or context) may even have reverse effects.

6 General discussions, implications and further research

Future research should focus on gaining a deeper understanding of the role of imagery in reducing consumption barriers for conscious products. Above all, it would be highly interesting to investigate the effectiveness of different ways of encouraging imagery. Considering the pioneer character of the presented empirical work, further research efforts should be put into the comprehension of the effects of measures varying with regard to the concreteness of the evoked imagery, in order to identify advantages and disadvantages of rather individual (unspecific stimuli) vs. rather "guided" (concrete stimuli) imagery.

Finally, the relevance of imagery is likely not limited to conscious products but should be explored also for other product categories with inherent consumption barriers (such as novel foods).

7 References

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Complete references available upon request.

The Reviewer Motivation Problem – How to Improve the Relationship with this User Group?

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Abstract:

Reviewers are a very interesting customer group in the daily business process of scientific journals, because reviewers are expected to work for the journal without a monetary reward. How to motivate reviewers? Is it possible to adopt proved strategies from scientific articles and CRM? This contribution consists of a state-of-the-art overview of the literature on scientific reviewer motivation and it introduces a new motivation hierarchy and a survey. Next, we present an analysis of reviewer's motivation in the context of a journal by conducting a survey to solve the reviewer motivation problem and show how to build relationships with reviewers.

Keywords: *reviewer motivation, scientific publishing, long-term relationship*

1. Introduction

1.1. Purpose

In a scientific journal there are four main participants: Readers, authors, reviewers and editors. In the best case, during his career (with growing scientific experience) a customer is participating in all groups and build a long-term relationship with the journal.

Especially, the customer group of the reviewer is a very interesting group, because a reviewer is expected to work for the journal without a monetary reward. But without these well qualified researchers the scientific quality management process is not possible. But, how to motivate reviewers? Is it possible to adopt proved strategies from scientific articles and from CRM to motivate reviewers and to create guidelines?

Because of the management and our experience of the scientific and organizational processes of a scientific journal, we know that it is often problematic to acquire reviewers and we know, every scientific journal needs a high number of good reviewers. Scientists wish to receive fast reviews with a high quality, but on the other side, they know, because of their own personal experience, how complex reviewing of a scientific article is.

For these reasons, this contribution considers the reviewer motivation problem. To find a solution for this problem, we conducted a survey based on a state-of-the-art -literature research and created guidelines and "nudges" to improve the motivation and loyalty of reviewers.

1.2 The Terms Motivation & Nudges

Motivation is the reason, why a person is acting or behaving in a particular way. It includes the person's willingness and goals. To be motivated means to be moved to do something (Ryan & Deci, 2000b). Motivation is highly valued in all parts of life, because of its most important consequence: Motivation produces (Ryan & Deci, 2000a). Motivation theory distinguishes between intrinsic and extrinsic motivation. Intrinsic Motivation means a person really wants to do something without an incentive from a third party. Intrinsic motivation refers to doing something, because it is inherently interesting or enjoyable (Ryan & Deci, 2000b). The driving force for the Extrinsic Motivation is an external stimulus. A person is extrinsic motivated to do something, because of an incentive (e.g. salary, earn social respect, have social compassion, fear of punishment). Mostly, the driving force for a reviewer is a combination of intrinsic and extrinsic reasons.

Thaler & Sunstein (2009) popularized the term nudge. The nudge theory means a concept in behavioral economics that influences the behavior and decision making of a person without direct prohibitions or economic incentives (Hansen & Jespersen, 2013; Saghai, 2013). It is important that nudges are transparent and never misleading (Thaler, 2015).

1.3 The Testing Environment – the Journal X¹

The journal X consists of two series: A and B. XA publishes papers of short to medium length in the emerging field of Data Science and covers regular research articles and special issues on conferences, workshops and joint activities of a classification society and its cooperating partners and organizations. The submitted papers are reviewed by at least two reviewers. Every fully reviewed and accepted paper will be published in an online-first version that is freely available and already quotable.

XB covers scientific articles which improve methods, algorithms, and processes over the whole data lifecycle. The special feature of this series is the organization of the journal around data sets.

¹ Placeholder used instead of the real name (because of identifying information)

2. Approach & Method:

2.1 State-of-the-Art-Literature Research & the Reviewer Motivation Hierarchy

In the scientific literature many studies discuss the main incentives for reviewing an article. It is important to distinguish between “scientific reviews” for journals and “product/service reviews” (e.g. Mathwick & Mosteller, 2017; Matta, & Frost, 2011) for consumer to find useful articles for our purpose. With the help of these articles (see table 1) we developed a motivation hierarchy and used it as basis for the creation of our survey.

There are three main groups of motivations (the first and the second groups are divided in subcategories):

- Self-focused personal reasons: These reasons are rather self-focused and self-achievement reasons. Zaharie & Osoian (2016) claimed that this motivation group is often the incentive for developing scholars to review an article.
 - o Group membership / personal relationships: This motivation incentive shows the wish to identify with the scientific community. This is especially important for younger reviewers, because to the role of developing scholars in the academic community: They want to be part of the scientific community, want to be recognized by the other members as part of the group, and want to build a relationship with editors, etc. This result coincides with the study of Mulligan, Hall & Raphael (2013).
 - o Insider knowledge: Nobarany, Booth & Hsieh (2016) and Kreiman (2016) showed that reviewing is a way to gain information about the state-of-the-art in the own research field (awareness). Zaharie & Osoian (2016) pointed out, that this is also a way to gain information about the review process itself and to learn what is important in a special journal. Another, less mentioned reason, is the reason of “enjoying critical reading”.
 - o Monetary rewards: Zaharie & Osoian (2016) and Squazzoni, Bravo & Takács (2013) have shown that monetary rewards decrease the motivation, quality, and efficiency of the review. But, there is one advantage of motivating reviewers with the help of a monetary reward: The reviewers meet the four-week deadline (Chetty, Saez & Sandor, 2014).
- Community-focused personal reasons: The incentives in this group are characterized by the framework of altruism and giving back and frequently is the incentive for senior reviewers (Zaharie & Osoian, 2016), which already received reviews from the community in the past and are (valued) members of the scientific community.
 - o Good scientific work / reputation in the field: The motivation reason in this incentive scheme is the improvement of scientific work in general. The reviewer wants to encourage good research (Nobarany, Booth & Hsieh, 2016), benefits from the impact of the authors’ work on the scientific discipline (Kreiman, 2016), and to help to establish or maintain a good reputation in the own scientific field (Nobarany, Booth & Hsieh, 2016).
 - o Joy of helping (Enjoy helping): In the study of Mulligan, Hall & Raphael (2013) 85% reported that they just enjoy helping authors to improve their papers. Also, this reason helps to improve scientific work in general.
 - o Giving back / altruism: Nobarany, Booth & Hsieh (2016) showed that the idea of “giving back” is a motivation reason. The reviewers reported that they received reviews from the community, so they feel that they should review for the community. Also, Kreiman (2016) found that reviewers benefit through the pleasure that an altruistic act can provide. Mulligan, Hall & Raphael (2013) substantiated these reasons.
- Organizational reasons: A good organization of the review process is mandatory. If the process is unclear or complex, nobody likes to be involved in this process. Also, if the process is clearly defined, it is important to consider general rules in the review

process to improve the satisfaction of the reviewers. Such an organizational aspect is the choice of a good time period between the assignment and the deadline of the review.

Reference + Year	Method (Approach & Research Tool)	# RR	"Main" Results – Short Overview
Mulligan and Raphael, 2010	Global study *needed time approx. 15 min *invited 40000 researchers from over 10000 journals * contacted via e-mail and requested to complete the survey + reminder	4037 10%	69% of the reviewers are satisfied with the current system of peer review. The article examined the influences and attitudes of the reviewers towards peer review and found that peer review is valued, but needs to be improved, e.g. 56% feel that guidance is needed and 68% wished a formal training in peer review. Double-blind peer review is seen as the most effective form of peer review, because it seems to be the most objective and helps eliminate reviewer bias.
Squazzoni, Bravo and Takács, 2013	Modified version of the standard experimental framework "Investment Game"	136 –	Monetary rewards decrease the quality and efficiency of the review process. This coincides with the results of other researchers (e.g. Vohs, Mead, & Goode, 2006; Heyman and Ariely, 2004; Bowles, 2008; Frey and Jegen, 2001).
Mulligan, Hall and Raphael, 2013	Relates to the 5 years old study in Mulligan and Raphael (2010)	4037 10%	The responding reviewers are mostly community-focused: 90% review papers to play an active role in the scientific community, and 85% just enjoy helping authors to improve their papers.
Chetty, Saez and Sandor, 2014	Experiment over a 20-month period *Participants randomly assigned to 4 groups	1500 –	The experiment with 1,500 referees at the Journal of Public Economics shows that the shortening of the deadline from six weeks to four weeks reduces the median review times from 48 days to 36 days.
Zaharie and Osoian, 2016	Semi-structured interviews with reviewers from natural and social sciences	42 82.4%	Younger reviewers tend to apply the "self- achievement frame" while senior reviewers were rather part of the "community focused oriented frame".
Nobarany, Booth, and Hsieh, 2016	Questionnaire *invited 1952 reviewers of submissions to conference CHI 2011.	307 15.7%	The results show which factors are important for the motivation of reviewers. The authors asked for the position, review experience, level of involvement, area of education, gender, the reasons for reviewing, and to indicate how much each of the different influences the motivation for reviewing.
Kreiman, 2016	Literature review and considering his own long experience.	– –	The article shows interesting information about the motivation to participate in the review process, an inspiring list of journal JSLHR and the has a good literature overview.

Key to table 1: # = Participants; RR=Response Rate in %

Table 1: Literature Overview

2.2 Survey

With the help of the survey we want to find out, which incentives motivate existing and (potential) new reviewers. Next, we aim at the improvement of the satisfaction of the reviewers with X's review process and would like to create best practices to motivate reviewers. As target group for the survey, we selected all registered reviewers of the journal

XA. We randomly split all registered reviewers into two groups (Group 1; G1 and Group 2; G2) with 58 persons each. It is important, that only 48 (26 in G1 and 22 in G2) of the 116 contacted reviewers have completed at least one review on XA. The other 68 invited persons are either assigned at the moment or only registered. The first group (G1) was invited at Friday, 1:46 pm via email and the second group (G2) at Tuesday, 1:46 pm via email, as well. The text of both invitation emails was identical. We sent no reminder and in the survey there was no mandatory entry. The overall response rate was 31.0%. Due to the small sample size the difference between the respondents in the groups is not significant. The questions and a short overview of the results are shown in the tables 2 to 7 in the appendices. The survey (background of each question) was developed with the help of the evaluated motivation groups and the papers in table 1.

3. Findings

On the basis of the results of the survey we developed guidelines and nudges to improve the motivation of reviewers according to the different motivation groups. We discussed our results with a group of reviewers on a scientific conference. As an online-first journal we want to use the possibilities to contact our authors with help of the journal system (OJS). We provide a first view on the wished motivation incentives and the resulting changes in the CRM of X:

Self-focused personal reasons:

Question 2 of our survey shows that only a few of the responding reviewers are self-focused. To gain insider knowledge seems an incentive for reviewing for nearly 42%.

Monetary rewards are no option for X, because the quality and efficiency of the review process decreases and for financial reasons.

An incentive for some reviewers would be to get a certificate of reviewing from journals. This certificate should indicate the level of efforts (number of reviews). In this connection, different reviewer recognition platforms are discussed (e.g. publons.com). The predominant opinion of the senior reviewers was, that something like a certification or a recognition platform is not needed. Younger reviewers (e.g. post doctorates) are thinking about to add such an award to the CV. (Electronic) certificate (personal delivered) or public appreciation was a rather controversial topic. The wish to be honored for the review is a part of the motivation incentive group membership/ personal relationships.

Community-focused personal reasons:

The second question in our survey indicates that most of the X reviewers do the reviews for the community (95%) and want to ensure the quality of the scientific work and the reputation in the field (75%). Another motivation reason is personal contact. Our experiences in the management of X, in another experiment in the journal environment and many studies in the field of CRM demonstrate that personal "customer contact" is important. Customer acquisition is comparable with the assignment of reviewers. Our experience indicates that the positive response (commitment) of new potential reviewers who get invited via personal email with a personal reference is at a level of 61.3%. The positive response by potential reviewers who get invited through the OJS by the editor of the journal is only at 8.3%. This is surprising, because the invited persons and the editor had a personal relationship. So, this experience shows that personal communication matters. Next, we have shown that the motivation reason giving back / altruism is an important incentive. Many studies indicate that motivation reason giving back / altruism is an important incentive. Many studies indicate that appreciation is important. Therefore, at least once a year, X wants to appreciate the reviewers by saying "Thank you". A good opportunity is it to combine this appreciation with a Christmas-/New year -greeting card (electronic) . It seems that this nudge leads to a

higher motivation to review another article in the next year or to finish a overdue review (before the Christmas break).

Organizational reasons:

We discussed the adaption of the “timeslot” and the “reminder”: Chetty, Saez and Sandor (2014) recommend 4 weeks as a suitable timeslot. Our experience indicates, that on average the completed reviews need 3.4 weeks (approximately 24 days), and also the result of question 1 has shown a median of 4 weeks (58% are satisfied with this deadline; 80.6% would prefer a longer deadline). But on the other side, we have to consider the needs of the authors. Obviously, a trade-off between reviewers’ (enough time for review) and authors’ (fast review) preferences exists. X decided to stay with 4 weeks (“default”), but grant an extension to 6 weeks on request. According to the Nudge theory, setting such a default leads to fewer deviations (Campbell-Arvai, Arvai & Kalof, 2014; Pichert & Katsikopoulos, 2008). In addition, a reminder will be set 1 week before the end of the deadline (wished by 91.7%). Furthermore, the majority of reviewers wished to read the review of the other (second) reviewer of the evaluated paper to see how another reviewer assessed the paper.

With the help of the survey we found meaningful motivation incentives for reviewing an article for the journal X and implemented them in the journal environment (e.g. OJS). First results shown that the changes have a positive impact and help to motivate reviewers.

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Appendices

Question 1: In your opinion, how many weeks are the perfect time slot to complete a review? (Time between assignment and deadline in weeks).

	All	G1 (Friday)	G2 (Tuesday)
average	5.44 weeks	4.85 weeks	6.19 weeks
median	4.0 weeks	4.0 weeks	5.0 weeks
min; max	2 ; 16 weeks	3 ; 8 weeks	2; 16 weeks
<= 4 weeks	52.7%	60%	43.8%
<= 5 weeks	58.3%	65%	50%
<= 6 weeks	80.6%	85%	75%

Table 2: Results Question 1: Perfect time slot to complete a review

Question 2: Which reasons motivate you to review an article?

Reasons [<i>Order of the answers during the survey</i>]	All	G1	G2
Giving back (I receive reviews → I feel I should review for the community) [2]	94.4% (34)	95.0% (19)	93.8% (15)
Help other researchers to improve their work / encourage good research [7]	75.0% (27)	75.0% (15)	75.0% (12)
Part of my job [1]	55.5% (20)	55.0% (11)	56.2% (9)
Read new research before anyone else / I want to know what is new in my field know what is new in my field [5]	41.7% (15)	50.0% (10)	31.0% (5)
Get insider's knowledge of the review process (Because of the knowledge about the review process, I learn about how to write more effectively) [3]	41.6% (15)	35.0% (7)	50.0% (8)
Include the reviews in my curriculum vitae [6]	22.2% (8)	20.0% (4)	25.0% (4)
Enjoying critical reading [4]	22.2% (8)	20.0% (4)	25.0% (4)
Social recognition / Social pressure [8]	2.7% (1)	5.0% (1)	0.0% (0)
Other reasons (please comment) [9]	11.1% (4)	10.0% (2)	12.5% (2)

Table 3: Results Question 2: Motivation reasons in decreasing importance. The results are shown in per cent "%" and in persons "()".

Question 3: Do you wish to get reminded one week before the end of the deadline?

Answer	All	G1 (Friday)	G2 (Tuesday)
yes	91.67% (33)	85% (17)	100% (16)
no	2.78%** (1)	5% (1)	0% (0)
maybe / no matter	5.56% (2)	10% (2)	0% (0)

Table 4: Results Question 3: Is a reminder wished? The results are shown in per cent "%" and in persons "()".

** This person sets a reminder in his or her calendar by itself and reported that he or she is delivering the reviews in time.

Question 4: How many reviews do you do in one year (on average)?

	All	G1 (Friday)	G2 (Tuesday)
reviews/year (on average)	12.26	12.35	12.14
min. r/y (median)	8	10	4.5
min. ; max. r/y	0;50	0 ; 30	1;50
<= 12 r/y; r/y (average)	72.2% ; 6.08 rev.	70.0% ; 6.9 rev.	75.0% ; 5 rev.

Table 5: Results Question 4: Reviews per year on average

Question 5: How long (in hours) do you need for one review (on average)?

	All	G1 (Friday)	G2 (Tuesday)
hours/review (on average)	11.62	10.0	13.56
hours/review (median)	5.5	4.5	8.0
min. ; max. h/r	1;50	2;50	1;40
<= 5h/r in % and persons;	50.0% (18);	65.0% (13);	31.3% (5);
h/r (average)	3.2h	3.26h	3.0h

Table 6: Results Question 5: Reviews per year on average (last row in per cent "%" and in persons "()").

Question 6: Do you work in a university or in a company

	All	G1 (Friday)	G2 (Tuesday)
University	88.9% (32)	95.0% (19)	81.25% (13)
Company	5.5% (2)	5.0% (1)	6.25% (1)
Else ((1) own company; (1) research institute)	5.5% (2)	0% (0)	12.5% (2)

Table 7: Results Question 6: Where are you working? The results are shown in per cent "%" and in persons "()".

Volunteer emotions and motivations during mega events: the case of Rio 2016 Olympics

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Abstract:

Two studies analyze volunteer emotions and motivations in the context of mega events. Study 1 shows that volunteers experienced 4 main motivations, in line with what was previously reported in other Olympic Games study (Bang, Alexandris & Ross, 2009). These motivations can be used in order to help future organizers attract volunteers. Study 2 presented the main problems faced by volunteers during their experience. By going deeper into the negative emotions that volunteers faced we can highlight several managerial suggestions that could boost morale within the volunteer group such as an active hotline for volunteers; the existence of a system in place to solve issues volunteers have with their work equipment; and work with volunteers during the process of their exiting role (Gellweiler, Fletcher, & Wise, 2019), allowing for more positive emotions to arise and improve chances of volunteering in the future.

Keywords: *volunteer, emotions, motivations*

1. Introduction

According to the Tokyo 2020 Olympic Committee (Tokyo, 2019), "Games volunteers will be directly involved in assisting Games' operations before, during and after the Tokyo 2020 Games, and will be expected to play an active role in helping to create a positive and exciting atmosphere, to contribute to the overall success of the Games". This opening statement at the volunteer page of the Tokyo 2020 Olympic Games clearly states how important the role of these people are for the Games.

Hosting mega events requires the organization and coordination of uncountable activities, ranging from managing the competition to dealing with athletes (Farrel, Johnston and Twynam, 1998). This process relies heavily on volunteers (Williams, Dossa, & Tompkins, 1995; Kim, 2018), that is people that do "unpaid non-compulsory work; that is time individuals give without pay to activities performed either through an organization or directly for those outside their own household." For instance, during the first Olympic events of this century the participation of volunteers have the profile and number of volunteers involved in the Olympic Games have changed considerably since the start of the Olympics Modern Age, in Athens, 1896. They were Scouts and members of the military force responsible for this work, according to Moreno, Moragas, Paniagua (1999), and the number was nothing more than a few hundred. The political and social evolution that the world experienced throughout the twentieth century brought with it a significant increase in this number and this function in the Games began to be exercised by another kind of people, with other motivations as well.

There was some stagnation around 30,000 volunteers between Los Angeles 1984 and Barcelona 1992, according to Moreno, Moragas, Paniagua (1999). However, this number grew from then on, reaching 100,000 people in Beijing 2008 (Yan & Chen, 2008), 70,000 in London 2012 (International Olympic Committee, 2013) and 52,000 at the Rio 2016 Games, with 90,000 participation expected in Tokyo 2020. The last two data, according to Tokyo (2016).. The role these volunteers have range from guidance at venues and drive athletes and affiliated with the Games between venues by car, through work on registration, doping control, media support, language services and touristic information, among many others duties required to allow everyone is involved to the Games to have a satisfactory experience (Tokyo, 2016; Khoo and Engelhorn,2011).

Services marketing theory posits that customer satisfactions is related to employee satisfaction (Chung-Herrera, Goldschmidt, Hoffman, 2004; Bitner, Booms, Mohr, 1994), therefore the management of volunteers for mega events, such as the Olympics and World

Cups, is crucial for the success of the Games. The study of volunteers is key for developing more effective volunteer management strategies” (Kim, Fredline, and Cuskelly, 2018, p.1). Kim, Kim, Kim, Zhang (2019) identified that organizational support is key for future volunteering.

These management strategies are especially relevant in Olympic sports because most participants will be episodic volunteers, as opposed to long-term volunteers (Kim, 2017). These episodic volunteers have little or no knowledge on how to be a volunteer. Additionally, despite being from the home country of the event, most of the time these volunteers come from different cities, therefore facing additional hurdles from living and extended time in a different location (Chen, Zheng, Dickson, 2018).

Kim’s (2017) systematic review shows that extant research has focused mainly on quantitative, survey-based studies. There is a lack of qualitative studies that focus on the underlying factors that can shape volunteer participation, retention and willingness to volunteer again.

Based on the discussion presented, the main goal of this research is to analyze the motivations and emotions that volunteers experienced during Rio 2016. In order to accomplish this goal, we analyzed the comments of volunteers of Rio 2016 Facebook group. Results indicate several points of attention that could improve management of volunteers during mega events, therefore contributing to the overall success of the event.

2. Literature review

In this section we present and discuss the main drivers that motivate volunteers in mega events. We also highlight the discussion of emotions related to the process of volunteering, since this sheds light on how the organizing committee of a given sport can work to provide a better volunteering experience. This will be the base for creating a coding guide in order to analyze the data collected.

2.1 Volunteers and motivation

According to Cnaan, Handy, and Wadsworth (1996), pure volunteers can be defined within four dimensions: (1) free choice/ (2) remuneration; (3) structure - context where work is performed; and (4) the beneficiaries. These volunteers are an essential aspect of the sport service delivery, since they provide support for Games logistics in areas such as protocol reception, transportation, security, medical aids, game operation support, venue operation

support, news operation support, and cultural activity organization support (Giannoulakis, Wang, and Gray (2007).

Studying volunteers of Sidney 2000 Olympics, Wang (2004) identified that motivations for volunteers are fivefold: (1) Altruistic Value – prosocial and altruistic values, (2) Personal Development – desire for learning, knowledge, and experience, (3) Community Concern – obligation to community, (4) Ego Enhancement – enhancing oneself positive feelings, and (5) Social Adjustment – relationship with people.

When gathering the expectations of volunteers before the 2002 Commonwealth Games, Ralston, Downward, Lumsdon (2004) identified the main drivers of participation: connect to something special; have empathy with the event; commit as a member of the region; improve the image of the region; the experience itself.

2.2 Volunteer management and episodic volunteers from non-host region

The process of managing volunteers can be understood in seven stages: The process of managing volunteers can be understood in seven stages: (1) planning – identify potential volunteers, provide role or job descriptions for individuals, (2) recruitment – match the skills experiences and interests to roles, (3) screening – verify the accreditation of coaches and officials, (4) orientation - Encourage volunteers to operate within a code of acceptable behaviour, (5) training and support – mentor volunteers, manage the work and provide resources, (6) performance management – monitor and provide feedback to individual volunteers, and (7) recognition - Recognise and thank outstanding work or task performances of individual volunteers (Cuskelly, Taylor, Hoye, and Darcy, 2006). Ralston, Downward, Lumsdon (2004) identified that training should be given especial consideration, because expectation before the actual event are highly influenced by the type of training provided. Organizations can benefit from giving volunteers the chance of choosing their tasks, schedule, or with whom they are going to work with (Allen & Bartle, 2014).

Additionally, Gellweiler, Fletcher, and Wise (2019) introduce the concept of “role exit”, where volunteers experience the ending of the volunteering experience. This process impacts volunteers as they fell sadness and loss when experiencing the transitioning between volunteering and normal life.

The process of managing volunteers must take into account the existence of episodic volunteers. Since they can behave differently from continuous volunteers, who effectively engage in long-term volunteering (Kim, 2017), organizing committees’ should strive to give special attention to this group. With regards to mega events, volunteers are often from the

home country and are not previously involved in volunteering ((Tokyo, 2016; Moreno, Moragas & Paniagua, 1999).

2.3 Emotions and service delivery

Emotions can have significant effects on service quality evaluations (Mattila, & Enz, 2002), especially when service employees (e.g. volunteers) go beyond their expected role (Zhao, Yan, & Keh, 2018). These emotions can be divided between those that represent negative affect (Anger, Sadness, Fear, Shame) and positive affect (Contentment and Happiness) (Laros, & Steenkamp, 2005). When employees display positive emotions, this evokes positive emotions in customers, increasing their participation in the service encounter (Zhao, Yan, & Keh, 2018).

3. Method

3.1 Data collection and Sample

This study used mixed methods (Study 1 - quantitative and Study 2 - qualitative) to analyze user-generated content of the Facebook group Rio 2016 Official Volunteer Program. In the group, participants expressed their experiences as Olympic and Paralympic Games volunteers with statements ranging from demonstrations of admiration and joy to information searching in order to perform volunteer functions.

For study 1 a sample of all the posts from the Facebook group was collected and the data transposed do a database. In total 201 posts for the Summer Olympics and 226 for the Paralympic Games were analyzed using Iramuteq, which is a licensed software that provides users with statistical analysis on text corpus and tables composed by individuals/words. It is based on R software and on python language. Each post was coded using the following motivations: expression of values (concern for others, the success of the event, and society), patriotism (pride in and love of the country, and allegiance to the country), interpersonal contacts (meeting and interacting with people and forming friendships), career orientation (gaining experience and career contacts), personal growth (gaining new perspectives, feeling important and needed), extrinsic rewards (getting free uniforms, food, and admission) and love of sport (event related to sport, sport is something I love or being involved in sport activities) (Bang, Alexandris & Ross, 2009). And for emotions: the emotions anger (angry, frustrated, irritated, unfulfilled, discontented, envious and jealous), fear (scared, afraid, panicky, nervous, worried and tense), sadness (depressed, sad, miserable, helpless, nostalgia and guilty), shame (embarrassed, ashamed and humiliated), contentment (contented, fulfilled

co-occurrences and motivations

occurrences and emotions

Similarity analysis allows identifying the words co-occurrences, which provides information on the words connectivity. Additionally it helps to pinpoint the structure of a text content. Moreover, it allows identifying the shared parts and specificities taking into consideration the descriptive variables that are identified in the analysis (Marchand and Ratinaud, 2012). Figure 1 presents the connection of words that represent motivations, such as expression of values, patriotism, interpersonal contacts and personal growth. For example, as regards the motivation "expression of value", the words "volunteer" and "Paralympic" indicate more co-occurrences, indicating the context that the expression of value is more evident, that is, concern for others, the success of the event, and society are more relevant. Figure 2 highlights word co-occurrences and emotions. Emotions 5 and 8 are respectively contentment and pride. As an instance of contentment, words "park", "good" and "person" present situations which volunteers manifest such an emotion.

4.2 Study 2 (*Problems face by Volunteers*)

The following table shows examples of occurrences of problems involving volunteers before, during and after the Olympic Games in Rio de Janeiro, divided by categories.

- Before Rio 2016 Games: Insufficient training (I was cast as operations support team member, but I have no idea what you do in practice. Can anyone help me?); Delivery of work equipment (... I could only get my uniform at the facility, but they only gave me a t-shirt. I didn't even get the blouse.); System failure (I received an invitation letter, but on the portal my situation remains under review. The committee said that this letter is not worth it and that I should wait for another. I'm sad.); Lack of empathy (... and they still look at people with indifference in training.).
- During Rio 2016 Games: Difficulty of locomotion / transport (Stayed an hour to get out of Deodoro); Volunteers' food (sour and spoiled food in the cafeteria of Marina da Glória. I couldn't work today. Feeling sick.); Volunteer support (I have my two pants torn and they didn't forward me to make the exchange. I'll keep them torn to the end.).
- After Rio 2016 Games: Lack of certificate delivery or incorrect delivery (my certificate went wrong and I don't know where else to complain. I feel like a ping pong ball.); Sense of emptiness (what now? What am I going to do tomorrow without the Games?); The organization of the event did not fulfill the agreement with the volunteers (promises and more promises... where the fraternization of the volunteers that was promised?);

Communication fails (it was already difficult to talk to the committee during the Games. Now that they're done, it's impossible. I didn't get the certificate.).

5. Conclusions

The main goal of this research was to analyze the motivations and emotions that volunteers experienced during Rio 2016. In order to do so we collected the user-generated data from the official Facebook group of Rio 2016 Volunteers. The collected data proved to be very rich in emotions and motivations from the volunteer group. Brazilians are one of the most active in social media and they shared vividly before, during, and after the Games. Our main findings point out to a group of volunteers composed mostly by Brazilians that were travelling from different cities, that is, they were non-host region volunteers (Chen, Zheng, Dickson, 2018). This poses additional barriers to the process of volunteering, such as accommodations and transport within Rio de Janeiro city because of not knowing the city.

Study 1 shows that volunteers experienced 4 main motivations, in line with what was previously reported in other Olympic Games study (Bang, Alexandris & Ross, 2009). These motivations can be used in order to help future organizers attract volunteers. Study 2 presented the main problems faced by volunteers during their experience. By going deeper into the negative emotions that volunteers faced we can highlight several managerial suggestions that could boost morale within the volunteer group. For instance, there should be an active hotline for volunteers to call upon to solve their main issues, especially regarding schedule and transportation. Additionally, there could be a system in place to solve issues volunteers have with their work equipment, such as clothing and permits. Finally, working with volunteers during the process of their exiting role (Gellweiler, Fletcher, & Wise, 2019) would allow for more positive emotions to arise and improve chances of volunteering in the future.

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Facing turbulences with organizational slacks in a corporate scandal: Firm value and risks

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Abstract:

Corporate scandals bring uncertainty to the firm, decreasing returns and increasing volatility. Our study aims to determine the buffering role of organizational slacks when a corporate scandal hits a firm, and their effect moderated by market turbulence. To measure it, we perform an event study analysis on a sample of 1,940 corporate scandals. Results show that organizational slacks decrease the negative impact of the corporate scandal on the firm and mitigate the negative effect when customer preferences actively change. We contribute to the marketing-finance interface literature and bring novel insights to managers on how to utilize organizational slacks efficiently.

Keywords: *slacks, scandal, turbulence*

1. Introduction of Paper

Since the nineties, corporate scandals¹, such as CEO misconducts, accounting frauds, and product recalls have been on the rise. Today, the number of scandals has never been higher. While in 2007, the media reported only 12 notable corporate scandals, this figure increased to 46 in 2016 (RepRisk, 2019). This trend has been attributed to soaring market pressures and competitive intensity, which have led firms to resort to acts of misbehavior (Cleeren, Van Heerde, and Dekimpe, 2013). Scandals do not only cause financial damage to firms in the short-term, but they can also lead to long-term consequences such as bankruptcy (e.g., Takata Corporation).

Organizational slacks² are readily available resources that firms can use to face unforeseen events. Cyert and March (1963) describe organizational slacks as the difference between the total resources detained by the firm and its total mandatory expenses. In other words, the level of slacks increases when the market is on a growth trajectory and decreases when the market has a downward trend. These events can threaten their sustainable competitive advantage or become a new investment opportunity to increase their profits. Research to date has acknowledged the value of organizational slacks (e.g., Alessandri, Cerrato, and Depperu, 2014; Rajagopalan, 1997). Their impact on firm value and firm performance are widely analyzed in various contexts (Chattopadhyay, Glick, and Huber, 2001; Hill, Hitt, and Hoskisson, 1992; Wu & Tu, 2007).

Despite the increasing number of corporate scandals, no study has investigated organizational slacks as a potential resource for firms to draw on during and after a corporate scandal. Neither organizational slack nor corporate scandal research brings an understanding of the mechanisms through which organizational slacks can act as a cushion in a situation of scandal. This study aims to fill this gap and contributes to the existing literature by exploring whether detaining organizational slacks are beneficial for firms facing a scandal. In particular, it examines the effect of slacks on the performance of firms after a scandal, and how environmental turbulence affects this relationship. We hypothesize that slacks help a firm to minimize the impact of the scandal in terms of the firm value and firm risk. We explore the characteristics of slacks to understand the magnitude and the direction of the effect of a corporate scandal on the firm value and firm risk, and the moderators of this effect by focusing on market turbulence. To explain the effect of slacks on firm performance and risk, we rely on (1) the resource-based view (RBV) to understand the mechanisms of slacks as financial resources, (2) the agency theory to clarify how slacks might be used by managers, and (3) the signaling theory to posit how corporate scandals and detaining slacks affect investor's reactions.

2. Literature review

2.1. Organizational slacks

Firms must continuously decide between being fully efficient now or keeping part of their financial resources for potential opportunities/threats in the future. Organizational slacks are one of these resources. Cyert and March (1963) define organizational slacks as the difference between the total resources detained by the firm and its total mandatory expenses. Firms keep them in case of unexpected events and, hence, are considered as vital for firms (Daniel, Lohrke, Fornaciari, and Turner, 2004). They can be a financial cushion to cover unexpected losses and cash-flow shortages (e.g., Alessandri, et al., 2014; Rajagopalan, 1997), i.e., serve as a buffer to face threats and be ready for investment opportunities (Bourgeois III, 1981).

¹ We use "scandal" and "corporate scandal" interchangeably.

² We use "slack" and "organizational slack" interchangeably.

2.2. *Corporate scandals*

Since the end of the nineties, corporate scandals have been more frequent (Kalavar & Mysore, 2017). Some of the main reasons for this increase are changes in the complexity of the global market, production processes, and customer expectations (e.g., Cleeren, Dekimpe, and Helsen, 2008; Cleeren, et al., 2013; Dawar & Pillutla, 2000). Corporate scandals have a significant and long-lasting impact on various facets of a firm's performance and sometimes even lead to bankruptcy (Boone & Ivanov, 2012). They influence stock market performance, market shares, sales, and reputation of the firm (e.g., Dyck, Morse, and Zingales, 2010; Kang, Germann, and Grewal, 2016; Pennings, Wansink, and Meulenberg, 2002), as well as managerial decisions such as capital raising, risk anticipation, and capital structure policies, ex-post, and ex-ante scandal (Bonini & Boraschi, 2012). One of the most studied areas in corporate scandal research is product-harm crises (e.g., Cleeren, Dekimpe, and van Heerde, 2017). The other mainstream of corporate scandal is corporate fraud, such as Enron (2001), Tyco (2002), and Mossack Fonseca (Panama papers in 2016).

3. Hypothesis development

3.1. *Effect of organizational slacks on shareholder components*

Various types of surplus in resources exist in a firm when the economic situation is favorable. When the resources are above what the firm needs to cover its current operations, the firm will gather organizational slacks (Cyert & March, 1963; Greve, 2007; Levinthal & March, 1981). They absorb the effects of external changes. They also change the way the firm will respond to external threats. Therefore, slacks are particularly useful in an unfavorable environment as they have a protective effect (Chattopadhyay, et al., 2001). As slacks are immediately disposable resources, the reaction against the negative effect of a scandal will appear quickly (Zuo, Fisher, and Yang, 2019). Based on the signaling theory, we hypothesize that investors will receive the signal that the firm can deal with the scandal. Thus,

H1: "Organizational slacks reduce the negative impact of a corporate scandal on the firm's financial value."

Moreover, detaining organizational slacks is a way of preparing for an investment opportunity (Bourgeois III, 1981). Organizational slacks help managers make decisions not only in the short term. These resources can also be allocated to focus on new paths in long-term activities (Nohria & Gulati, 1996). In this sense, the firm will be able to develop sustainable valuable, rare, inimitable, and not substitutable (VRIN) resources, increasing future cash-flow expectations and business stability, and decreasing firm volatility. The firm will be able to use these resources as a buffer until recovering from the scandal and signals that it is ready to overcome difficulties. Based on both RBV and signaling theory, we hypothesize that investors will not consider future performance as volatile if the firm can secure a sustainable competitive advantage with VRIN resources. Thus,

H2: "Organizational slacks reduce the negative impact of a corporate scandal on the firm's idiosyncratic risk."

3.2. *The moderating role of environmental turbulence on shareholder components*

Market turbulence refers to the instability of consumer preferences and expectations (Kohli & Jaworski, 1990). Market turbulence (i.e., instability of consumer preferences) is a source of uncertainty that can disrupt the firm operations (Jaworski & Kohli, 1993). We suggest that market turbulence has a moderating effect on the effectiveness of detaining slacks when facing a scandal.

On the one hand, in a market where customer needs are always changing, firm resources and competences to satisfy customers need to be continuously and promptly adapted (Danneels &

Sethi, 2011). It means the firm needs to optimize its resource allocations to hold its competitive advantage as much as possible to retain its customers (Barney, 1991). However, from an agency dilemma perspective, slacks push managers to invest the surplus of resources anywhere relevant to managers' interests, even below the cost of capital. Slacks also slow down decisions of breaking unattractive investments. These investments are usually based on short-term profits (Jensen, 1986; Wu & Tu, 2007).

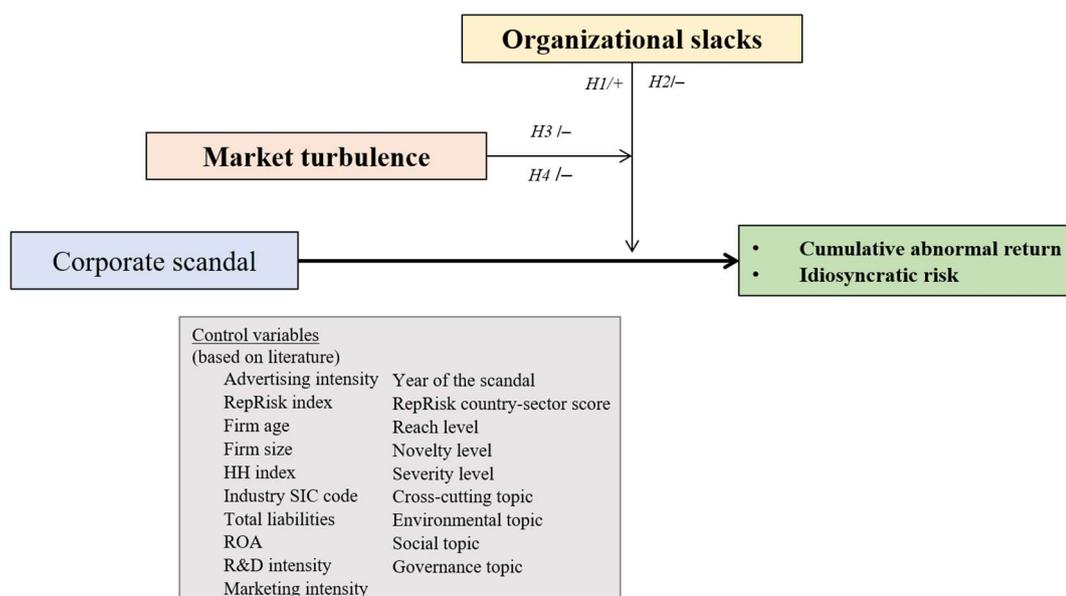
Detaining slacks will send a disturbing signal to investors. First, managers will not be able to make right and fast decisions in allocating resources; second, the firm will not have the capacities to make modifications in its organization to face a corporate scandal and change customer preferences. With such a signal and considering the agency theory, investors expect issues in limiting losses due to the scandal and in generating future revenues. It will negatively affect short-term measurements of the firm value. Thus,

H3: "In a turbulent market environment, organizational slacks increase the impact of a corporate scandal on the financial value of a firm."

On the other hand, firms have opportunities to enter new market segments and fulfill new customer needs in a highly turbulent market environment (Danneels & Sethi, 2011). One of the common allocations of slacks is innovations (Voss, Sirdeshmukh, and Voss, 2008). More specifically, Voss, et al. (2008) find that slacks have a positive effect on exploration. Exploration activities can bring profound modifications to a firm in the long term. Investors will see exploration as positive by improving its long-term sustainable competitive advantage. The firm signals to investors that it will be possible to manage the volatility of cash flows from the scandal by operating deep internal changes in the long-term. Thus,

H4: "In a turbulent market environment, organizational slacks decrease the impact of a corporate scandal on the idiosyncratic risk of a firm facing a scandal."

Figure 1 schematizes the four suggested hypotheses:



4. Data sources

To build a unique database containing information of all the US-listed firms facing a scandal from 2007 to 2019, we proceeded data from five sources: RepRisk, Kantar Media, Kenneth French's website, Compustat, and Center for Research in Security Prices (CRSP). RepRisk (RR) scans media, stakeholders, and other information sources in 15 different languages daily.

This database gives a list of all issues that appeared in various press releases on more than 95,000 listed and not listed firms from 2007 to 2019. It provides an analysis of each firm risk and industry reputation. Second, we use Kantar Media, which lists advertising expenditures of various firms in the US media. Third, to compute a long-term event study, we collect data on Kenneth French's website. Finally, Compustat and CRSP are widely used in empirical research requiring financial data on firms. We end with a sample of 362 US-listed firms regarding 1,940 scandals.

5. Methodology

In our analysis, which requires determining the impact of an event on a firm (i.e., a corporate scandal), we have chosen the event study methodology (Sorescu, Warren, and Ertekin, 2017). To understand how the market and stakeholders react to this event, we analyze the fluctuations in the market share value of a focal firm in a short-term and long-term perspective. We determine the impact of organizational slacks on a firm during a scandal in two steps: We estimate the explanatory market models and measure short and long-term shareholder components, which are stock returns and idiosyncratic risk, respectively. Then, we determine the impact of organizational slacks on these shareholder components in different situations and build a regression model based on our observations.

5.1. Measuring cumulative abnormal returns and firm risk: Step 1

The short-term analysis is used to determine the impact of an event based on a few milliseconds (especially in finance research) to a few days. In this study, we use a daily window (e.g., Chen, Ganesan, and Liu, 2009). Event study methodology assumes that the stock price contains future cash flows of a firm that the market expects. The change in the firm stock price determines the impact of a specific event on this firm, as the stock price is an essential driver of financial information (e.g., Chen, et al., 2009; Swaminathan & Moorman, 2009).

Then, we compute normal and abnormal returns (ARs) by choosing a period of estimation and an event window, to see the differences between these two measurements. We choose an estimation period of 252 days (representing an average of 1 year of trading days) prior to the scandal and ending ten days prior to the scandal (Swaminathan & Moorman, 2009). The result of this difference is considered as the "effect of the event" (Sorescu, et al., 2017). Considering possible leakage of information before the event (Swaminathan & Moorman, 2009) and possible delay in including the new information from media in the stock price (Raassens, Wuyts, and Geyskens, 2012; Sood & Tellis, 2009), we choose an event window of [-3;+3] (Johnston, 2007; Kalaignanam, Kushwaha, and Eilert, 2013). As we define the event window longer than one day, we measure the short-term shareholder component, the cumulative abnormal returns (CARs), which are the sum of daily ARs in a time window, i.e., the aggregate effect of the event (Brown & Warner, 1985).

Finally, we choose a market model to estimate the expected market returns. As the asset price model has more significant efficiency of estimating event effect than constant mean return model (Srinivasan & Bharadwaj, 2004), we use the market model which considers the risk-free rate of the return and a risk factor (Brown & Warner, 1985).

The long-term event study works with a similar idea of information detained in the market price as the short-term methodology. This part of our study aims to define the causal link between slacks and shareholder components, and, to avoid cross-correlation issues, we follow Mizik and Jacobson's (2009) recommendations by using stock returns and risks as the long-term effect measure. Following Mani and Luo's (2015) methodology to measure idiosyncratic

risk, we estimate the five-factor Fama-French model for each firm with a daily rolling window regression of a one-year moving window (an average of 252 open business days).

5.2. Regression modeling: Step 2

The second step to compute the final results consists of determining the impact of slacks and market turbulence on each firm in a situation of a scandal. To do so, we use linear regression on CARs and the idiosyncratic risk measured as dependent variables, separately. We build the following equation (1) to explain the main effect:

$$Y_{it} = \beta_0 + \beta_1 SLK_{it} + \beta_2 TURBM_{it} + \beta_3 SLK_{it} \times TURBM_{it} + \beta_4 X_{it} + \varepsilon_{it} \quad (1)$$

where Y_{it} represents either the CARs of the firm i for the event t or the idiosyncratic risk of the firm i for the event t (computed by the first stage regressions); SLK_{it} is the organization slack of the firm i for the event t ; $TURBM_{it}$ is the market turbulence of the firm i for the event t ; X_{it} is a vector of other control variables; and ε_{it} is an error term. Equations for short-term and long-term shareholder components (ARs and idiosyncratic risk, respectively) are similarly specified.

6. Results

6.1. Effect of organizational slacks on shareholders' components

On a short-term measure, the results show that organizational slacks have a positive and significant effect on CARs' [-3; +3] time window ($\beta = 0.0011$; $p < 0.05$). We conclude that the utility of slacks can be used as a buffer in case of a scandal. Managers will be able to decrease the impact of the scandal on the firm by implementing slacks where resources are needed. Even if detaining slacks means extra/more costs for the firm, it might be appropriate to increase the level of slacks when there is an upward trend on the market. It will help to protect the firm from the threat caused by a scandal, as slacks are very efficient in an unfavorable environment (Chattopadhyay, et al., 2001). H1 is supported.

In support of H2, organizational slacks have a negative and significant effect ($\beta = -0.00005$; $p < 0.1$) on the idiosyncratic risk of the firm. This finding confirms that slacks reduce the firm's idiosyncratic risk as perceived by investors. Detaining slacks help the firm when facing a scandal by reassuring investors on the volatility of future cash flows. As a safeguard, investing in slacks can be positive for the firm not only to face a scandal and its resulting direct costs, but also to decrease the cost of financing, keeping in mind that a higher risk increases the cost of debts.

6.2. The moderating role of market turbulence on the shareholders' components

To test H3 and H4, we include an interaction between the market turbulence variable and the organizational slack variable. First, the moderating role of turbulence appears to have an effect on the short-term measurement since results are significant ($p < 0.1$). Our findings show that slacks have a negative effect on CARs' [-3; +3] window ($\beta = -0.0005$; $p < 0.1$) if the market is turbulent. The results support H3. It means that if the firm evolves in a turbulent market, managers should not invest in slacks, as they will increase the negative effect of a scandal on the firm's value. Investors might believe that managers will not be able to adapt to the firm's organization (1) to manage the negative impact of a scandal and (2) to continue generating revenues in the short term. Detaining slacks will probably increase negative ARs caused by the scandal.

Second, when the market is highly turbulent, we find that slacks have a negative and significant effect ($\beta = -0.00006$; $p < 0.05$) on the idiosyncratic risk. In this particular case, detaining slacks decreases the firm's idiosyncratic risk. It shows that investors believe slacks are a type of resource to detain when facing a corporate scandal to decrease the volatility of

future cash flows. When facing a scandal, detaining slacks might reassure investors that the firm will be ready to invest in long-term activities, and be able to fulfill customer preferences, even in a highly turbulent market. H4 is supported.

Table 1 compares the model without interaction (1 and 2) with the model with interaction (3 and 4) for each dependent variable. We use t-test to compare the relevance of the coefficients for H1-H4.

Table 1. Model regression comparison

	(1) CARs [-3;+3]	(2) Idiosyncratic risk	(3) CARs [-3;+3]	(4) Idiosyncratic risk
Organizational slacks (w)	0.00116781** (0.00054384)	-0.00004952* (0.00002770)	0.00138159** (0.00054717)	-0.00003735* (0.00002218)
Market turbulence (w)	-0.00510879* (0.00305101)	0.00018566* (0.00011066)	-0.00053738 (0.00407647)	0.00081072** (0.00032707)
RR index	-0.00186757 (0.00114019)	0.00005163 (0.00003546)	-0.00170079 (0.00114127)	0.00007510* (0.00003827)
Firm size	0.00229386 (0.00267257)	-0.00009061 (0.00006225)	0.00183416 (0.00270278)	-0.00018001*** (0.00006068)
Firm age	0.00000058 (0.00000039)	0.00000001 (0.00000002)	0.00000049 (0.00000040)	-0.00000000 (0.00000002)
HH index	0.02879242 (0.04515285)	0.00068175 (0.00064835)	0.03177951 (0.04435815)	0.00102266 (0.00073411)
Total liabilities	0.02314628* (0.01186215)	0.00000804 (0.00032750)	0.02292113* (0.01189657)	-0.00005774 (0.00031309)
Advertising intensity	-0.14316510* (0.07671878)	0.00197102 (0.00236474)	-0.14377046* (0.07693204)	0.00195191 (0.00230702)
ROA (w)	0.05017894 (0.03857499)	-0.00295074*** (0.00093309)	0.05327901 (0.03881618)	-0.00235155*** (0.00077710)
R&D intensity	0.20351186 (0.13526615)	0.00073435 (0.00239549)	0.20756420 (0.13547255)	0.00122511 (0.00214781)
Marketing intensity	-0.00373106 (0.02125653)	0.00050647* (0.00029853)	-0.00681913 (0.02130980)	0.00005280 (0.00034696)
RR country-sector score	0.00032984 (0.00030241)	-0.00000729 (0.00001093)	0.00028570 (0.00030566)	-0.00001239 (0.00001106)
Slacks x Market turbulence	- -	- -	-0.00049132* (0.00028844)	-0.00005639** (0.00002461)
Constant	-0.06412383* (0.03305495)	0.00144676 (0.00103698)	-0.06073954* (0.03322748)	0.00216190** (0.00091757)
Reach level	YES	YES	YES	YES
Novelty	YES	YES	YES	YES
Severity level	YES	YES	YES	YES
Environmental	YES	YES	YES	YES
Social	YES	YES	YES	YES
Governance	YES	YES	YES	YES
Cross-cutting	YES	YES	YES	YES
Year F.E.	YES	YES	YES	YES
Industry F.E.	YES	YES	YES	YES
Number of observations	1,945	1,724	1,945	1,724
R-squared	0.03438064	0.18195054	0.03500333	0.21011566

Standard errors are in parenthesis

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

“(w)” stands for “winsorized”

7. Conclusion

In prior resource allocation literature, the importance of detaining slacks has been established in various types of favorable and unfavorable environmental contexts (Daniel, et al., 2004; Hill, et al., 1992; Wu & Tu, 2007). Positive and negative sides of slacks on the firm's value have been well described as well (Alessandri, et al., 2014; Bourgeois III, 1981; Phan & Hill, 1995). However, none of the studies has developed an analysis in the context of corporate scandals. To establish the importance of resource allocations during a corporate scandal, we studied the effects of organizational slacks on the firm value and firm risk. Recognizing that

environmental conditions in which the firm operates are crucial and could mitigate the effect of slacks, we have examined the moderating role of the turbulent market environment. The process of our analysis relies on the event study methodology. Fluctuations in the firm value were computed by applying a short-term event study analysis. For the volatility of the firm, we used a long-term event study to measure the firm's risk after the scandal. Consistent with our theorizing, on the one hand, organizational slacks are helping the firm facing the negative effects of a corporate scandal, when the environment is stable. On the other hand, slacks do not have the same buffer application in a highly turbulent market environment. In this context, slacks have a negative effect on the firm value but help in the volatility of the firm by reducing its idiosyncratic risk.

8. Contributions

Extent literature recognizes the importance of slacks and the role of a buffer when firms need available resources to face threats or to invest in unexpected opportunities, but literature does not offer specific analysis when the threat is a corporate scandal. We take a step toward analyzing not only the utility of slacks in such situation and the positive effects this type of resources can have on the firm, but also if the buffer effect stands in a context where customer preferences change frequently (i.e., market turbulence).

In the corporate scandal literature, product-harm and product recall scandals represent a large part of the event studies. Previous studies in marketing have been considering one type of scandal or another (i.e., product harm and fraud) to explain a problematic. In this study, all types of corporate scandals are considered, including product-harm and product recall crises. This choice allows the generalizability of corporate scandal consequences and its mechanisms. Moreover, previous research has mainly focused on one industry, one firm or one product, describing how a corporate scandal has a negative effect on the firm and its stakeholders (Backhaus & Fischer, 2016; Chen & Miller, 2007; Cleeren, et al., 2008). Also, scholars keep studying "popular" industries such as automotive and medical/pharmaceutical drug industries (Cleeren, et al., 2017). As large-scale cross-sectional studies are rare, our research aims to provide an extended analysis of corporate issues by considering all industries, including marginal industries such as toy, food, and clothing industries.

From a managerial perspective, not being prepared for the worst is still an issue for most firms. In most cases, managers do not look at the firm as a whole by omitting considering some of the internal disposable resources. They also need to consider competitors, clients, employees, financial markets, governments, regulation, press and newspapers, cultures, and locations in the process of managing a firm. When dealing with a situation of corporate scandals, they have to deal with all these internal and external elements to communicate appropriately with the stakeholders. Our study provides novel insights for managers in helping with decision-making, investment decisions, and crisis management applications, by better understanding in which situations specific resources need to be implemented.

Finally, the volatility perceived by investors in the case of a corporate scandal poses a problem both for the present and the future of the firm. The firm's risk, more particularly idiosyncratic risk, is an essential topic in academic research, as it has important managerial implications. This study suggests dealing with the idiosyncratic risk by allocating slacks in long-term innovation activities. Srinivasan and Hanssens (2009, p.299) point out that the idiosyncratic risk "induces higher costs of capital financing, thus damaging firm valuation in the long run." It implies a big challenge for the managers to control the firm risk to expect sustainable growth, even after a corporate scandal.

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What is Business Development? – Possible Ways Forward in Theory Building, Methods and Future Research

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Abstract:

More and more companies have established business development units in their organization. Still, little is known about what actually characterizes business development. The aim of this study is to explore the scope and nature of business development and thus propose a uniform understanding and definition as well as possible advancements in theory building, methods and suggestions for future research. Therefore, based on a mixed-method content-analysis approach, we conduct a systematic literature review with a dataset of 36 research publications. Our insights indicate seven main topics describing, structuring and defining the scope and status quo of business development in academia.

Keywords: *business development, business developer, corporate growth, strategy, strategic management, strategic marketing, marketing research, corporate entrepreneurship, growth opportunities*

1. Introduction

Growth is a pivotal challenge for companies in an era characterized by globalization, increased competition and sophisticated customer needs (Kotler, 2011). Many markets have reached a high degree of saturation. The average lifespan of publicly traded North American companies lasts about ten years (Daepf et al., 2015). Consequently, companies have to identify new opportunities, need to innovate and adapt to new market demands. Against this background, business development (BD) has emerged as a professional role respectively corporate function in order to face these challenges and shape the futures of companies. The concept of business development is well established within companies in the practitioner world. The offering of BD jobs is growing remarkably (Turgeon, 2015). Whereas, academia still lacks an understanding and consensus of BD. Despite a growing body of research, BD still receives little attention (Kind & zu Knyphausen-Aufseß, 2007; Voeth et al., 2018). The aim of this paper is to yield insight into the scope and nature of BD deriving from existing literature. Our research makes a notable contribution to overcome the exploratory stage of BD research by means of a systematic literature review (SLR). It offers new perspectives by exploring the updated state of BD, the main (dis)agreements and gaps in literature. The SLR helps to illuminate a previously understudied research topic in order to identify the scope and a modern understanding of BD by synthesizing insights across different streams of literature. Furthermore, we consolidate definitions of BD to propose a viable, functional definition for future research.

First, we introduce the research framework followed by a short description of the dataset and the most important findings of the SLR. Based on these results, we propose advancements in the theorization of BD. Furthermore, the results show limitations and research gaps. On this basis, ways forward in terms of future research, methods and research designs are suggested.

2. Systematic Literature Review (SLR) Research Framework

Basias and Pollalis (2018) outline the importance of an effective literature review for progress in research. This study follows the methodological framework they propose for SLR. First, inclusion criteria are predetermined to narrow down relevant studies: The review focus lies on English academic journals, conference proceedings and BD books retrieved via EBSCOhost and EconBiz. No restriction in terms of publication date was made. The investigation expired at the end of October 2019. Only studies that address BD with their main topic and research interest are included. Therefore, a frame of reference in the understanding of BD has to be specified. As the term 'Business Development' is used in diverse fields and context, we derive exclusion criteria from a negative definition. Hence, BD is not developing aid or other areas on a national economy level, e. g. 'Small Business Development'. In the following, a two-step approach for finding relevant academic literature was implemented. First, a list of publications from relevant academic resources was generated. Therefore, the databases were screened with the search term: "Business_Development". The complete phrase "Business Development" was restricted only to the title. This search strategy resulted in a sample of 871 publications. Based on the review of abstracts and the consideration of duplicates, 778 publications were excluded. Out of the remaining 93 publications, full texts were completely read and again assessed for matching the inclusion criteria. A total of 25 articles was included. Second, BD literature has to be found that does not contain the term "Business Development" in its title. Thus, relevant experts in the specific research field of BD were identified and backward snowballing was conducted which implies finding citations and references in papers. Consequently, the reference lists of the previously 25 included studies were screened which resulted in 11 additional studies. In total, 36 publications are eligible for analysis.

3. Analysis of Dataset Characteristics

Our final dataset of 36 articles covers a period of almost 50 years (1972–2019). In sum, it can be stated that research in BD itself is in the development stage. BD is covered in a plurality of scattered, interdisciplinary business journals (management and marketing journals are predominating) without an anchorage in an own scientific field. Nevertheless, from the growth of the body of literature, it can be stated that in the past years, academia has recognized the need for more research in this area.

4. Main Results and Theoretical Contributions

Our research approach is highly explorative. This corresponds with the inductive derivation of categories using qualitative content analysis. The categories emerged from the data material by paraphrasing with the help of selection and generalization in order to achieve a higher level of abstraction. The understanding of the BD phenomenon is presented from a component-oriented, organizational-oriented, and process-oriented perspective. Hence, the qualitative synthesis of results of the dataset is presented alongside the following seven inductive categories:

- a. Component-oriented perspective: (1) *Tasks and activities*, (2) *people*, (3) *tools and instruments*.
- b. Organizational-oriented perspective: (4) *Organization and responsibility*, (5) *involved stakeholder and interaction*,
- c. Process-oriented perspective: (6) *Influencing and success factors*, (7) *BD objectives*.

We present our results in three steps. First, we analyze how researchers define the main tasks in BD, what kind of competencies and education the BD personnel have and which instruments they are applying. Second, we describe how the BD function is organized in the company and how it interacts with other business functions. Third, we illustrate crucial factors for BD and its desired outcome. Consequently, we can explore and analyze what characterizes BD.

4.1 Component-oriented perspective

Tasks and activities. The scope of BD can be described by its assigned tasks (Eidhoff & Poelzl, 2014). We have conducted a descriptive analysis to identify the activities and tasks business developers are carrying out, based on seven dimensions of practices: *Internal development*, *external development*, *market development*, *business functions*, *strategy*, *internal analysis* and *external analysis*. Within this diversity and extent of task dimensions, some practices received more attention than others. The most studied *internal development* tasks are the following ones: ‘New product development’ [29 articles], ‘New business development’ [26], ‘Innovation development’ [18], ‘New business models’ [17], and ‘New technology development’ [16]. The most mentioned activities in regard to *external development* are: ‘Acquisitions’ [23], ‘Partnering and cooperation’ [23], and ‘Mergers processes’ [17]. The dimension of *market development* is subsumed by the following tasks: ‘Entry in new market(s)’ [22], and ‘Market development’ [17]. What is more, business developers have to complete tasks related to other business areas. The most commonly described ones are: ‘Marketing strategies and activities’ [11], ‘Project management’ [10], and ‘Commercialization’ [9]. The most named practices for BD in regard to *strategy* are: ‘Resource management’ [17], ‘Generation, development and qualification of new ideas’ [13], ‘(Corporate) strategy development and execution’ [13], and ‘Planning’ [13]. BD tasks also include aspects of *internal analysis*, namely: ‘Provide the board/top management with data and presenting opportunities/Report the progress’ [8], and ‘Ongoing tracking and evaluation of the firm’s current position’ [7]. Lastly, a large number of the contributions focused on one of the following *external analysis* practices: ‘Identification, exploitation, evaluation and actualizing of new business opportunities/areas’ [28], ‘Market

analysis' [23], 'Growth opportunities' [15], and 'Customer research' [13]. The outlined 48 tasks cover an enormous range and scope of practices indicating a cross-functional and highly responsible role of the business developer in the enterprise. To explore and implement something 'new' seems to be one of the core activities of BD. It is worth mentioning, that BD tasks and practices vary mightily among firms (Eidhoff & Poelzl, 2014), according to the different phases of the BD process (Lorenzi & Sørensen, 2014) and by job level (Turgeon, 2015). The associated tasks and activities determine the understanding of BD. Our results reveal six key dimensions within the scope of BD, namely (1) new products, (2) new services, (3) new technologies, (4) new processes, (5) new business models, and (6) new markets. Hence, BD tries to search for, develop and/or realize these dimensions. This broad scope defines the uniqueness of the BD function.

People – Staffing Requirements and Desired Competencies/Qualifications. The role of the BD manager is linked to many skills, expectations and requirements. Employing staff should possess practical knowledge regarding the technology (Davis & Sun, 2006), product (Eidhoff & Poelzl, 2014), customer (Lorenzi & Sørensen, 2014), market (Daubenfeld et al., 2014) and industry dynamics (Valentine, 2003). Specialists knowledge from multiple business functions, e. g. marketing (e. g. Simon & Tellier, 2018; Voeth et al., 2018), sales (e. g. Ito, 2018), and management (e. g. Eidhoff & Poelzl, 2014; Lorenzi & Sørensen, 2014) are expected. Desired competencies that companies want to see from BD managers include interpersonal (Davis & Sun, 2006), methodological and analytical skills (Eidhoff & Poelzl, 2014). Overall, the demonstrated profile of business developers corresponds well to the previously discussed tasks and Sørensen's (2012) understanding of business developers as 'integrating generalists'. The required abilities for BD are diverse and reflect competencies characterized by highest standards and skills as well as varied knowledge and experience underlining the diversified character of BD. The mentioned attributes are subject to the BD job level and can differ regarding entry level (Turgeon, 2015).

Tools and instruments. Voeth et al. (2018) claim that instruments used in BD are mainly originated in strategic management, strategic marketing, finance and corporate entrepreneurship. Furthermore, instruments specifically developed for BD activities are mentioned. The variety of applied tools and instruments (all in all 51 are identified) as well as its anchorage in diverse business fields underline once again the comprehensiveness of BD activities and functions.

(1) *Tasks and activities*, (2) *people*, as well as (3) *tools and instruments* are identified as components defining the scope of the BD function (see Figure 1).

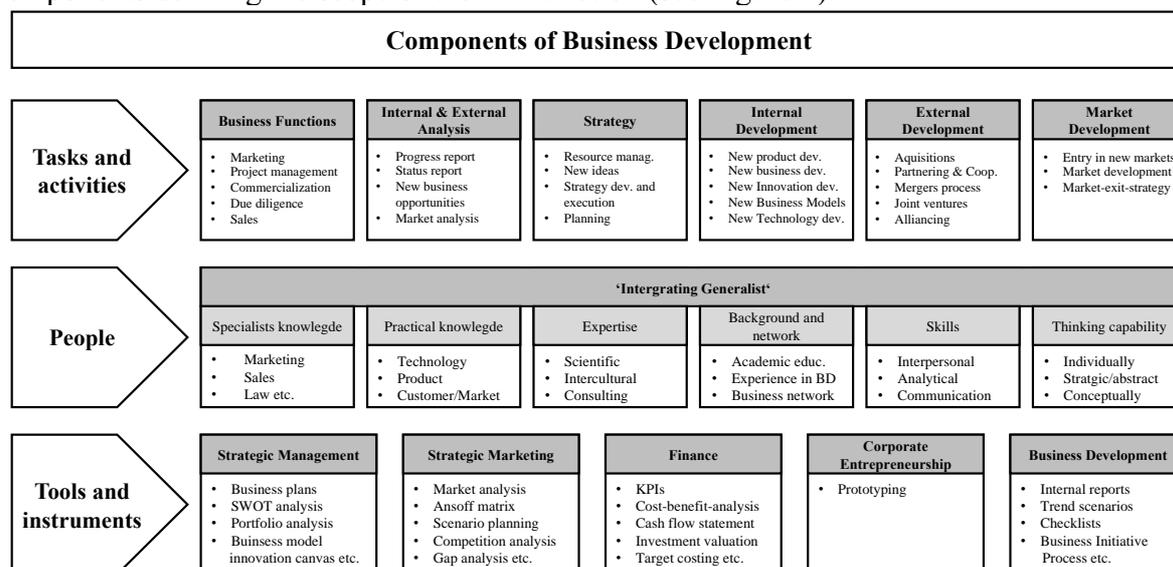


Figure 1. Components of an integrated Business Development Model

4.2 Organizational-oriented perspective

Organization and Responsibility. Kind and zu Knyphausen-Aufseß (2007) clarify three organizational implementation forms of BD in the biotech industry: implicit (no official description, no planned effort), established (official label, recognized relevance) and institutionalized (organizational unit). The SLR also reveals that BD is carried out in different ways within a company. On the basis of the dataset, it becomes clear that BD appears within a distinct department, unit or team [26]. In this context one can speak of an institutionalization of BD within a company (Kind & zu Knyphausen-Aufseß, 2007), mostly as a staff function (Eidhoff & Poelzl, 2014). Apart from that, there are individual executives who are responsible for BD. In the dataset, this form of the BD function – which is described as ‘established’ by Kind & zu Knyphausen-Aufseß (2007) – is shown in 9 cases. These individuals can be a single BD manager, the CEO of a company or entrepreneurs. Furthermore, BD can be performed within temporary structures by different, mostly cross-functional teams or projects. Thus, BD functions extend across other functional units, such as, for instance, marketing or innovation management (e. g. Daubenfeld et al., 2014). These different departments and activities are driven by and aligned to the business development goals. The temporary structures occurred in 8 of the cases. Valentine (2003) also mentions outside consultants [1] who can additionally support BD staff. In conclusion, our results confirm the findings of Kind and zu Knyphausen-Aufseß (2007) with regard to the established and institutionalized forms and the results of Voeth et al (2018) in terms of a cross-functional organization of BD.

In contrast, other aspects are remaining largely unclear, which in turn reveals a research gap. There are assumptions that the organizational form of BD is depending on the enterprise size (e. g. Davis & Sun, 2006). Still there is no empirical evidence yet. Moreover, the implicit organizational form of BD mentioned by Kind and zu Knyphausen-Aufseß (2007) could not be identified by the SLR as it is offering neither an official description nor a planned effort. It is more likely that the implicit form is found in other research fields like marketing or product development where BD activities are taking place without explicitly naming them like that. Thus, research in BD should not only focus on its own research field but rather complement it with other research streams. Furthermore, the level of responsibility taken by the stakeholders responsible for BD differ regarding the organizational form. The illustration in Figure 2 brings an assumed relation of organizational form and level of responsibility in BD together.

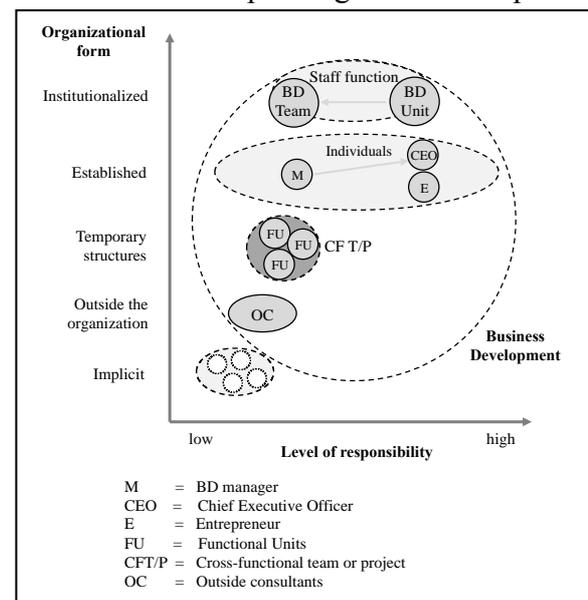


Figure 2. Organization and responsibility of Business Development

Involved stakeholder and interaction. Successful BD requires close cooperation between BD and many other divisions or areas of authority of the company. The SLR reveals four main corresponding corporate stakeholders: (1) Management, (2) Line function, (3) Staff function, and (4) External experts. (1) Management subsumes the board (e. g. Voeth et al., 2018), the CEO, top management (e. g. Lorenzi & Sørensen, 2014) or senior management (e. g. Koppers & Klumpp, 2009). (2) Line function includes divisions like marketing (e. g. Davis & Sun, 2006) or sales (e. g. Turgeon, 2015). Among the (3) staff function are, for instance, R&D (e. g. Ito,

2018), and the human resources department (e. g. Simon & Tellier, 2018). Lastly, (4) external experts, e. g. marketing research agencies, consultancies (Koppers & Klumpp, 2009), or academic researchers (Simon & Tellier, 2018) can be fruitful partners of BD staff. In sum, the BD function is involved in a cooperation with up to 36 other departments/stakeholders. Hence, BD can be seen as the essential link between all relevant internal and external segments of a firm.

4.3 Process-oriented perspective

Influencing and success factors. The majority of the papers [31] name factors that influence or determine BD. Resources (e. g. Voeth et al., 2018); especially human resources (e. g. Uittenbogaard et al., 2005) are mentioned in this context. In addition, BD is depending on predefined conditions within a company. For instance, BD has to show a fit with the given corporate strategy (Littler & Sweeting, 1987). The overall influencing factors are followed by success factors. These are, for instance, BD strategy (Uittenbogaard et al., 2005) and realistic BD objectives (Valentine, 2003). In addition, strong reputation (Uittenbogaard et al., 2005) and a well-known brand (Ito, 2018) are mentioned. The lack of these success factors provides challenges or a facility for failure of BD initiatives.

BD objectives. 31 papers in our dataset describe BD objectives. These objectives are various but with a central, overall aim. BD tries to maintain the company's leadership (Uittenbogaard et al., 2005), gain competitive advantage (Eidhoff & Poelzl, 2014;), accomplish market-driving activities (Gigliero et al., 2011), and develop new and existing business areas. Furthermore, BD is aiming to alter the status quo of business (Littler & Sweeting, 1987) by improving the firm's innovative performance (Lorenzi & Sørensen, 2014) and its product portfolio (Valentine, 2003). The overall and most mentioned objective of BD is corporate growth (e. g. Davis & Sun, 2006; Simon & Tellier, 2018; Voeth et al., 2018). The influencing factors and objectives of BD equal its determinants and outcomes. In its combination, a process model can be established (see Figure 3).

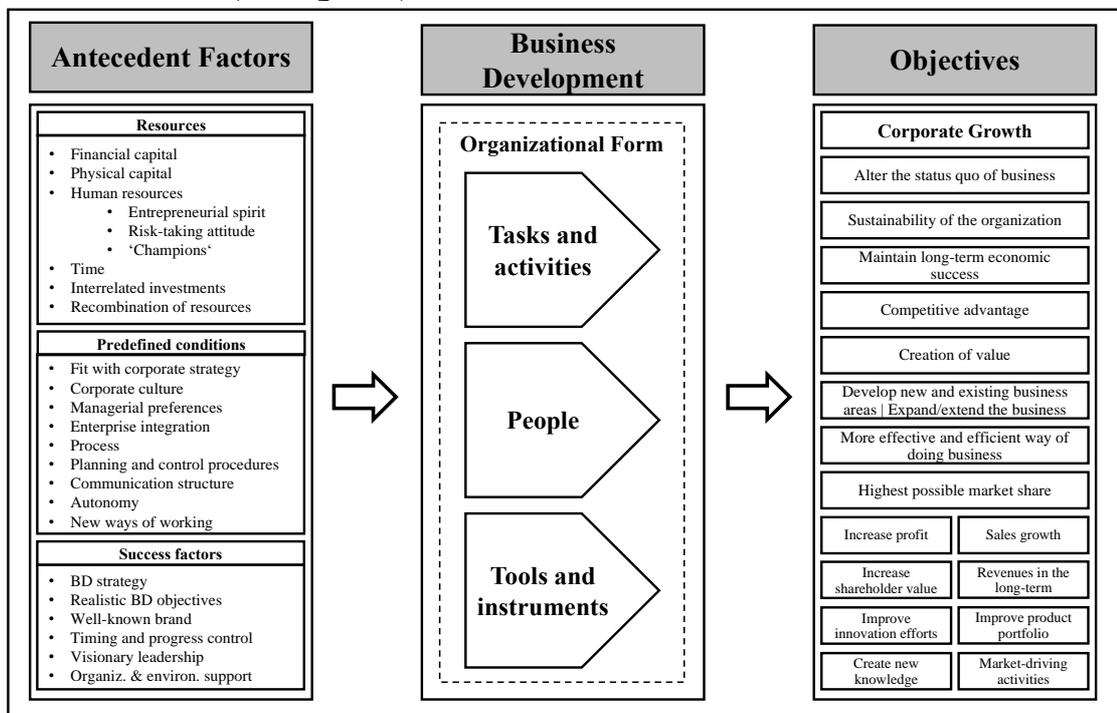


Figure 3. Business Development influencing factors and objectives

5. Analysis of Business Development Perspectives and Definitions

Authors of 12 articles formulated an own definition of BD. Further definitions, in the form of citations, can be found in 5 papers. The majority of papers in the dataset [19] does not provide any BD definition. These findings indicate that the understanding of BD is communicated poorly across the papers and is inconsistent in academia. On the basis of the insights offered by the SLR, we further aim to shape the understanding of the BD phenomenon. Hence, we present the existing disagreements in the BD literature followed by formulating a uniform definition of BD. Researchers trend to consider BD as part of corporate entrepreneurial practices (Davis & Sun, 2006), as a marketing activity (Gigliarano et al., 2011), as a commercialization function (Turgeon, 2015), as a strategic function (Valentine, 2003), or as an empirical manifestation of a capability (Kind & zu Knyphausen-Aufseß, 2007).

In line with the divergent perspectives on BD, the definitions show heterogeneous nature, even though there are some agreements regarding central characteristics. Eidhoff and Poelzl (2014) point out that the definition of BD by practitioners is strongly linked to the tasks BD is responsible for. This is also underlined with regard to the analysis of the existing BD definitions. The main component of nearly all definitions [16] are the tasks and activities of BD. Our SLR identified seven main pillars subsuming the variety of BD tasks. None of the individual BD definitions available includes all of these seven dimensions. However, if we look at them all together, all seven dimensions can be found. Hence, these should be combined and reflected in a universal definition of BD. In addition to these tasks, the personnel responsible for BD functions is a main component of BD (see Fig. 1). In contrast, the definitions do not refer to the business developer as the executing force. The business developer is the authority that combines the various tasks already established in other fields. Thus, as a generalist, he/she is decisive for the understanding of BD as an independent integrated field. Ten definitions refer to the objectives, mostly uniform in regard to growth opportunities. For this reason, a joined definition synopsis of BD should entail its objectives. The authors of the existing BD definitions referred to static content-related aspects mostly regarding tasks and objectives of BD. However, the SLR reveals that BD is strongly characterized by interactions and processes. Hence, we propose an enhancement in perspective reflected in the universal BD definition. The perception of interrelations between elements of BD as well as its interfaces within and outside the organization calls for a dynamic perspective. Eidhoff and Poelzl (2014, p. 843) emphasize that "a uniform definition and scope of business development are prerequisites for further research in this field in order to classify corresponding research accordingly." On this basis, the existing – mostly heterogeneous – definitions of BD are to be consolidated and enriched with the results of the SLR presented. The amalgamation of BD definitions is carried out along three components: (1) tasks and activities, (2) people, as well as (3) BD objectives and adds a dynamic view to the picture.

"Business Development realizes new business opportunities by involving all analytical and strategic preparation efforts as well as internal, external and market development practices to alter the status quo of the business. The Business Developer is a generalist with an interdisciplinary skillset and consolidated knowledge of several, diverse business functions who aims to drive long-term value and corporate growth."

6. State of Business Development Research and Implications for Future Research

This chapter further consolidates the status quo of BD research. By means of a descriptive analysis we identified the main research topics in BD. Furthermore, we offer an overview of the underlying theories and research streams for BD. Lastly, we outline the research approaches applied in the field of BD. The findings of the SLR lead to implications for further research.

Four main BD topics are particularly addressed by the authors: 'Development of a method, framework or guideline for BD' [5 articles], 'Scope of BD' [3], 'Management of BD' [3], and 'Success and (failure) factors of BD' [3]. Further 16 topics receive less contribution but are nevertheless important for future research. The first descriptive report reveals that BD research offers various perspectives, mainly focusing on methods and strategies of its internal and external implementation, on the function and organization of BD, and on the business developer. In addition, the diverse topics suggest that a BD perspective can contribute to rejuvenating the thinking about established phenomena.

The understanding and scope of BD is a vital research topic. Our findings reveal that BD shows many similarities to other business fields. Future studies should seek to create a common understanding of BD by researching its distinct and unique aspects. BD should be researched by its differentiating aspects to, for instance, corporate development, corporate venturing, marketing, and product development. Our findings indicate that BD is integrating these and many other functions. A crucial topic is the impact of BD on other research fields respectively business functions and vice versa. For instance, the SLR reveals that BD is specifically closely related to marketing (see tasks, tools, involved stakeholder, objectives). Giglierano et al. (2011, p. 31) even go so far to state: "BD is apparently an element of marketing that deserves more attention in marketing theory, development of practical methods, and marketing and entrepreneurship education". In contrast, our study illustrates that BD is a distinct profession, business function and field of research, hence, more than an element of marketing. Nevertheless, further research should investigate which areas of marketing are relevant to BD and how they interoperate to each other, e. g. marketing management, strategic marketing, or brand management. This can make valuable contributions not only to the field of BD research, but also provides new, interdisciplinary impetus for the status quo in marketing research. Above all, in this context a consumer- and market-oriented research perspective is suitable to broaden the BD research. For instance, studying BD in regard to the company's brand and taking a consumer-centric perspective, the brand with its signaling effects can take an important role in the innovation adoption by customers (Aaker, 2007). Furthermore, the previously mentioned BD components and interrelations should be investigated applying a process-oriented perspective. Accordingly, the conceptually derived success and also failure factors of BD need an empirical validation. The identified antecedent factors are primarily resource-based and have a focus on the specifications inside the company. Equally, the objectives respectively outcomes of the BD function are mainly company-internal-oriented (e. g. firm performance). As a consequence, research in BD lacks an understanding of the consumer- and market-oriented aspects in regard to determinants and outcomes of BD. Hence, further research should investigate the role of BD and its impact on, for instance, market/industry change or consumer behavior.

In order to address these enriching topics in BD research, a theoretical foundation is vital. 11 papers of the dataset comprise theories and/or research streams regarding BD; 25 are not mentioning any. Nine theories underlying BD can be identified. The most mentioned are: Dynamic capabilities [5 articles], and Resource-based view (RBV) [4]. Additionally, seven papers offer research stream(s); 29 do not. Five research streams are applicable for BD: Corporate entrepreneurship [5], Strategic marketing [3], Strategic management [2], Innovation research [2], and Strategic entrepreneurship (SE) [1]. 19 papers neither offer a theory nor a

research stream for BD. Two findings are particularly notable here. First, studies offer an interdisciplinary theoretical foundation of BD. Second, the majority of papers lack a theoretical foundation stressing the need of further theorization of BD.

The dataset contains 26 empirical and 10 conceptual articles. The empirical articles offer a range of methodologies, of whom 21 are of qualitative and 7 of quantitative nature. Thus, methodology-wise, research on BD has mainly been conducted using *qualitative interviews* [9] and *case-study designs* [9]. The predominance of qualitative research also refers to the underdeveloped state of research in BD. Furthermore, the studies in the dataset are primarily investigating large and mature enterprises representing a narrow spectrum of BD in organizations. The few quantitative studies are mainly descriptive. Therefore, we call for more large-scale surveys ($N > 100$) applying multivariate analysis methods (e. g. multiple regressions, causal analyses or structural equation modeling). In accordance, and with respect to the overcoming of the exploratory phase of BD research, representative, quantitative based studies with generalizable results should contribute to broadening the horizon in this area. For this purpose, a universally valid operationalization of the BD construct seems to be indispensable for gaining a better understanding of the different factors determining and contributing to BD. Moreover, outcome-driven research can be launched by post hoc interviews with participants obtaining their recall of events. Researchers could supplement the measurement of BD with content analysis of several sources, e. g. internal memos, business plans, (annual) reports or monitoring systems.

Altogether, our study prompts researchers to further investigate the scope, interrelatedness and processes of BD across job entry level, companies, industries and regions. A shift in focus towards quantitative surveys applying multivariate analyses offer advances in current knowledge. Furthermore, the advancements in theory building and methods foster new managerial and practical implications.

7. Conclusion and Limitations

BD is a complex phenomenon. A uniform definition does not yet exist. The SLR conducted in this paper could show that different disciplines make use of the BD construct, which thus can be analyzed from different perspectives. Against this background, we have proposed a definition that combines the main agreements of the status quo of BD research.

However, our SLR is subject to its own limitations. All SLRs can only review the existing knowledge perhaps resulting in a bias for over- or underestimation of effect sizes. Furthermore, a body of work in framing growth in businesses is not included in the SLR. The main focus of this research lays explicitly on the phenomenon of BD. But findings of the SLR reveal that BD itself is a multi-dimensional construct characterized by interdisciplinarity. Thus, adjacent research areas might be enriching and fruitful to further contextualize, shape and complement the research field of BD. We carried out the first rigorous and comprehensive SLR in regard to BD alongside 36 publications. In applying this methodology, we provided insights into seven main topics describing, structuring and defining the scope and status quo of BD in academia. The findings are in line with the theoretical foundation and spectrum of underlying research streams in BD stressing an interdisciplinary understanding of BD. Thus, we established a uniform definition of BD supporting the further theory building of this phenomenon. The combination of different research streams makes BD not only relevant for practice but also offers new areas for established fields of research as a connecting element. Still, more research applying additional theoretical reflection, diversified methods and research designs is needed to create a shared and holistic understanding of the concept of BD. In summary, BD research should be regarded as an own and distinct field with many cross-connections to established research fields. In practice, BD is the essential link between all internal and external segments.

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Customer engagement behaviour drives customer knowledge. Exploratory analysis of Polish banking industry

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Abstract:

Customer knowledge is an important source of value because firms use such knowledge to make marketing decisions and maintain dialogue with customers. The literature has not sufficiently investigated the role of customer knowledge in marketing research, which has resulted in a limited understanding of its current antecedents and consequences.

The aim of this article is to identify the customer engagement behavior factors determining the transfer of customer knowledge value (CKV). Exploratory factor analysis and multivariate regression analysis showed that customer social impact and propensity to create positively impact CKV, while propensity to modify the offer weakens the relationship.

Keywords: *customer knowledge, customer knowledge value, customer engagement*

1. Introduction

Customer knowledge (CKV) in this article is understood as a composition of skills and knowledge communicated by customers in the form of opinions and suggestions. Customer knowledge is achieved when a current customer is actively involved in improving firm's products or services by providing feedback or suggestions (Kumar, V. Pansari, 2016). It takes at least two forms in literature. Occurs as knowledge from customer (Gibbert et al., 2002) or customer knowledge value (Kumar, V. Pansari, 2016; Pansari & Kumar, 2017). This article uses the name of customer knowledge value – CKV.

Customer knowledge value is part of the concepts related to customer co-creation, such as value co-creation (Vargo et al., 2008), customer participation in new product or service development (Hoyer et al., 2010), customer participation (Fang, 2008, James Lin & Huang, 2013) and customer involvement (Feng et al., 2016). The essence of these concepts is to describe the role and importance of customer's ideas participation in the process of creating or co-creating a product, service or process in a company.

2. Theoretical background

Although CKV is widely used in research as propensity to give feedback, articles rarely identify its antecedents. Research mainly shows these antecedents as the cause of other phenomena (Aghamirian et al., 2015; Shafiq et al., 2011; Tseng & Pin-Hong, 2014). Celuch et al. used conditional process analysis to test the hypothesized mediating and moderating relationships. Results showed that retail employee customer-oriented behavior is mediated by customer social benefit perceptions to influence feedback. Further, social benefit perceptions will interact with the level of customer continuance commitment to impact feedback. Specifically, the impact of social benefits will be stronger when commitment to the retailer is higher (Celouch, Robinson, Walsh, 2015). Moreover, organisational learning in relation to service improvement is influenced by the interplay between the way data are gathered through customer feedback mechanisms and implemented at a branch or business unit level. The implementation depends on attitudes of middle management towards such mechanisms (Caemmerer, Wilson, 2010).

The articles attempted to identify the antecedents of the concepts described above, so they indirectly searched for the reasons for customer involvement in sharing ideas. These articles divide antecedents of these concepts into customer characteristics, companies initiatives and environment (Verhoef et al., 2010). This article regards customer characteristics. Customer involvement as information source (CIS) or innovators (CIN) is determined by customers needs heterogeneity while co-developers (CIC) is determined by and their needs tacitness (Cui & Wu, 2016). More knowledgeable customers are more involved (Hamza, 2015). Lead user's involvement does not support customer knowledge development (Jin & Chih-Yu, 2011). Innovation's self-efficacy impacts customer knowledge development (Wang & Lin, 2012).

Research shows that customers with a higher level of differentiation of needs and a higher level of product knowledge are more likely to pass their opinions and suggestions to companies. In addition, Kumar and Pansari write about CKV as an element of customer engagement (CE), listing its other elements such as customer lifetime value (CLV), customer referral value (CRV) or customer influence value (CIV). They also ask questions about the mutual relations between them.

3. Research framework

Considering the above, this article attempts to identify CKV antecedents understood in terms of Kumar and Pansari (Pansari & Kumar, 2017). The goal is to identify the relationship of particular customer engagement value (CEV) elements of the Kumar's concept with CKV (Kumar et al., 2010). The additional elements applied in the model are: the tendency to modify the product/service used (MOD) and the creative potential of the customer (CREAT). Figure 1 presents the conceptual model of the research.

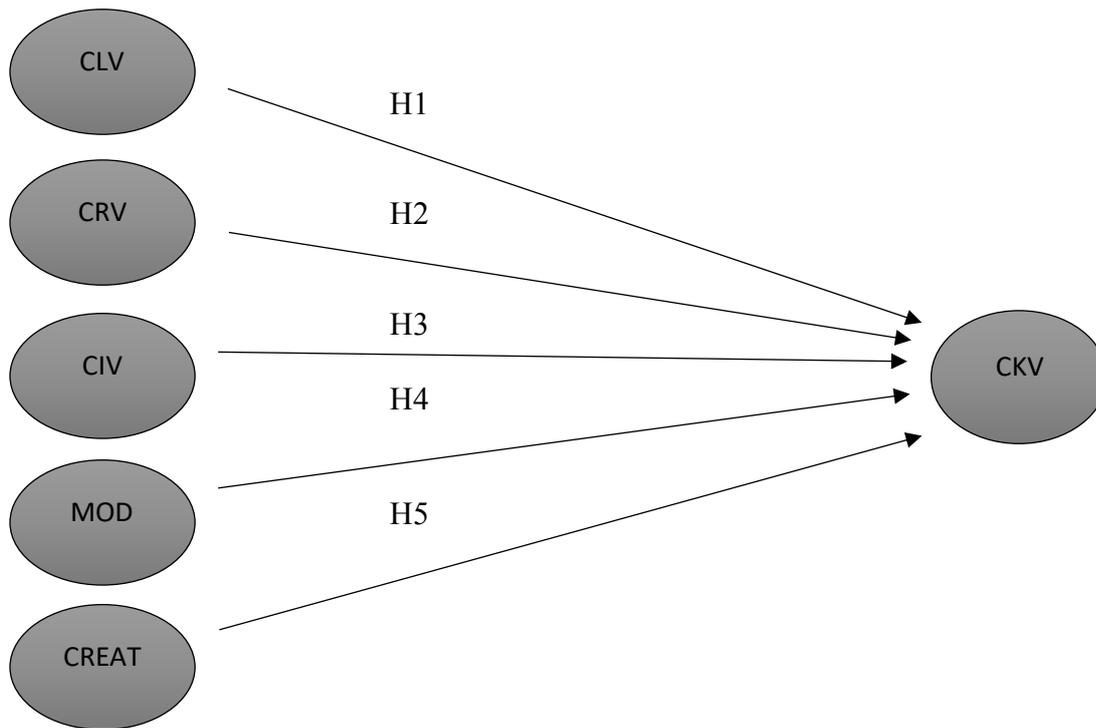


Figure 1. Customer engagement items according to Kumar and Pansari, 2016.

Table 1 presents the hypotheses:

Hypothesis 1	The greater the customer lifetime value, the greater the customer knowledge value
Hypothesis 2	The greater the customer referral value, the greater the customer knowledge value
Hypothesis 3	The greater the customer influence value, the greater the customer knowledge value
Hypothesis 4	The greater the propensity to modify the offer, the greater the customer knowledge value
Hypothesis 5	The greater the propensity to create the offer, the greater the customer knowledge value

Table 1. Research hypotheses

The research is exploratory, therefore the model is simplified. It was tested among customers of the banking industry as building customer relationship to a high degree.

4. Methodology

The survey was conducted on a group of 201 customers of various banks using CATI method with the random digit dialing (RDD) technique in October 2019. The customers were mainly regular customers (median length of relationship with a bank = 9.0), with a small majority of customers for whom the bank was not the first (51,7%), mostly women (52,7%), with secondary (44,8%) and higher education (35,3%), living mainly in the countryside (39,8%) and in small towns, up to 50,000 inhabitants (25,9%).

The variables included in the hypothetical model regard customer engagement behavior concept come from the work of Kumar and Pansari ((Kumar, V. Pansari, 2016; Pansari & Kumar, 2017). The contents of individual items are presented in Table 2.

CLV (customer lifetime value)
1. I will continue buying the products/services of this brand in the near future.
2. My purchases with this brand make me content
3. I do not get my money's worth when I purchase this brand
4. Owning the products/services of this brand makes me happy
CRV (customer referral value)
1. I promote the brand because of the monetary referral benefits provided by the brand.
2. In addition to the value derived from the product, the monetary referral incentives also encourage me to refer this brand to my friends and relatives.
3. I enjoy referring this brand to my friends and relatives because of the monetary referral incentives
4. Given that I use this brand, I refer my friends and relatives to this brand because of the monetary referral incentives
CIV (customer influence value)
1. I do not actively discuss this brand on any media
2. I love talking about my brand experience
3. I discuss the benefits that I get from this brand with others.
4. I am a part of this brand and mention it in my conversations.
CKV (customer knowledge value)
1. I provide feedback about my experiences with the brand to the firm
2. I provide suggestions for improving the performance of the brand.
3. I provide suggestions/feedbacks about the new product/services of the brand
4. I provide feedback/suggestions for developing new products/services for this brand.

Table 2. Customer engagement items according to Kumar and Pansari, 2016.

The following statistics tested the quality of the presented variables using exploratory factor analysis (EFA) made with the principal axis method (Table 3).

Variable	K-M-O test	Cronbach's-Alfa	Variance explained (after modifications)
CLV	0,726	0,768	59,573
CRV	0,660	0,905	79,754
CIV	0,775	0,947	90,709
CKV	0,821	0,910	79,669

Table 3. Exploratory factor analysis results of customer engagement items according to Kumar and Pansari, 2016.

All presented scales were rated as good (CLV) or very good (the rest of the scales). Only the CIV scale required one item to be removed (as seen in Table 1). MOD and CREAT variables were newly created on the basis of a three-step procedure. In the first step, based on the analysis of the literature related to customer knowledge, 326 items were identified that operationalized this knowledge. In the second step, 9 CRM managers selected 21 items, that operationalized customer's creative potential (face validity). In the third step, the study among 5 marketing academic-researchers identified the potential for modification (6 items) and creativity (6 items) (content validity). Table 4 presents the final set of items.

Propensity to MODIFY the offer (MOD)
1. I know, how to modify the product I use
2. I provide information/feedback for the products I use
3. I feel, that I help in the offer modification in terms of the products I use
4. I like to suggest new solutions for the products I use
5. I can show how to improve the offer in terms of the products I use (REV)
6. I know what could work better for the products I use
Propensity to CREATE the offer (CREAT)
1. I feel needed as new offer contributor
2. I prefer helping firms to create new offers that having a leisure time
3. I like to create the offer
4. I give the feedback if asked (REV)
5. I like to feel that I co-create something
6. I could give a good advice

Table 4. MOD and CREAT operationalization.

After eliminating selected items that did not meet its assumptions, exploratory factor analysis gave the following communalities results (Table 5).

Communalities			
MOD1	0,775	CREAT1	0,577
MOD5rev	0,527	CREAT2	0,443
MOD6	0,779	CREAT3	0,765
		CREAT5	0,793
		CREAT6	0,481

Table 5. EFA communalities

The following statistics tested the quality of the presented variables using exploratory factor analysis made with the principal axis method (Table 6).

Variable	K-M-O test	Cronbach's-Alfa	Variance explained (after modifications)
MOD	0,716	0,901	84,029
CREAT	0,729	0,857	63,796

Table 6. Exploratory factor analysis results of MOD and CREAT

Based on the analysis above, it should be noted that the MOD model is very good while the CREAT model – satisfactory, especially the variance explained is not that high as for MOD one.

5. Results

Table 7 shows the Pearson's correlation matrix with descriptive statistics, while mean = 0; standard deviation = 1. Two bottom rows present skewness and kurtosis.

	CLVFAC	CRVFAC	CIVFAC	CKVFAC	MOD	CREAT
CRVFAC	.128					
	Sig. (2-tailed)	.071				
CIVFAC	.192**	.591**				
	Sig. (2-tailed)	.006	.000			
CKVFAC	.078	.407**	.651**			
	Sig. (2-tailed)	.273	.000	.000		
MODFAC	.109	.022	.283**	.295**		
	Sig. (2-tailed)	.124	.760	.000	.000	
CREATFAC	.116	.179*	.484**	.567**	.781**	
	Sig. (2-tailed)	.102	.011	.000	.000	.000
	N	201	201	201	201	201
Skewness	-.605	.721	.048	.385	1.070	.428
Kurtosis	3.010	-.260	-.716	-.229	.946	.575

Table 7. Correlation matrix. MOD = MODFAC. CREAT = CREATFAC

Due to the exploratory nature of the study, it was carried out by means of regression analysis with the enter method. The model with five independent variables achieved the adjusted R square = 0.528, $F(5.195) = 45.715$; $p < 0.05$. Table 8 presents the detailed results of the analysis.

	B	Std. Error	Beta	t	Sig.	Tolerance	VIF	Hypotheses
(Constant)	5.705E-17	.048		.000	1.000			
CLVFAC	-.049	.050	-.049	-.985	.326	.958	1.044	Rejected
CRVFAC	.068	.061	.068	1.116	.266	.627	1.596	Rejected
CIVFAC	.424	.069	.424	6.122	.000	.492	2.031	Confirmed
MOD	-.254	.080	-.254	-3.188	.002	.371	2.695	Rejected
CREAT	.554	.087	.554	6.389	.000	.314	3.187	Confirmed

Dependent variable = CKVFAC. MOD = MODFAC. CREAT = CREATFAC

Table 8. Regression analysis results

The value of CKV is most positively determined by CREAT (Beta = 0.554), then by CIV (Beta = 0.424) and negatively by MOD (Beta = -0.254). The linearity coefficients do not indicate predictors colinearity and 3 variables turned out to be significant. The Durbin-Watson ratio is 1,89, which fulfills the condition of $1 < D-W < 3$ (1.89) so there is no correlation of residuals. The problem is heteroscedasticity identified (Figure 2).

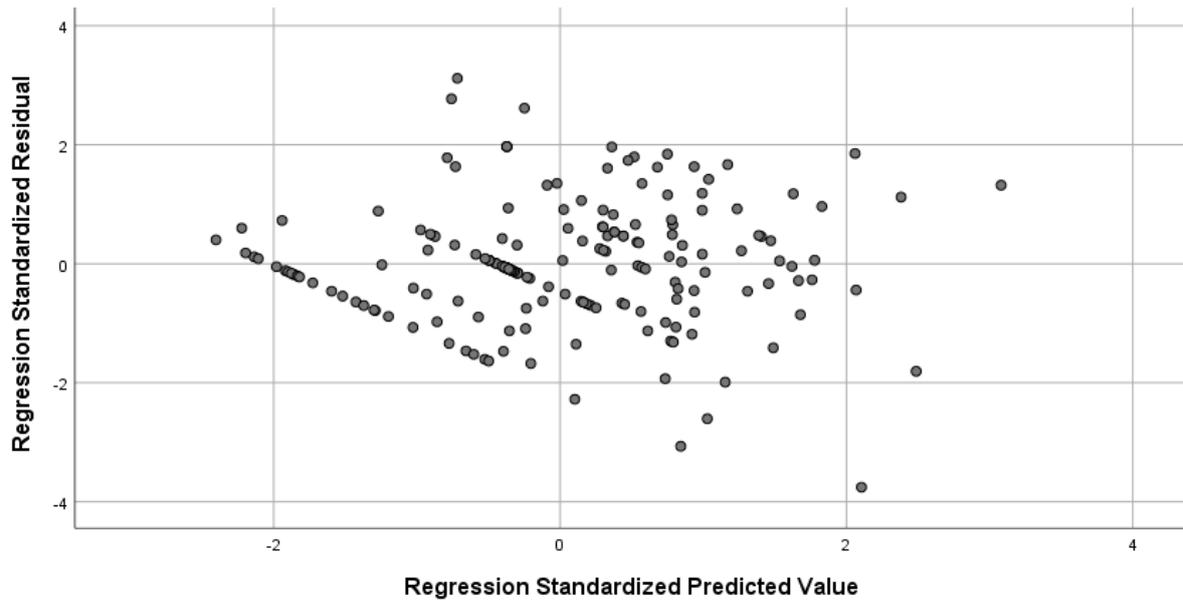


Figure 2. Regression analysis heteroscedasticity problem

Heteroscedasticity means that there is probably an interaction effect. This justifies further research on the identification of moderating factors.

6. Conclusions

Customers providing knowledge to the firm (CKV) are creative people (CREAT) and willing to take part in brand discussions (CIV). The propensity to modify (MOD) causes CKV weakening. Perhaps because that people with high MOD could be more conservative. On the other hand, purchasing engagement measured by CLV and propensity to recommend (CRV) do not translate into CKV. Perhaps they are more connected to the sphere of individual customer experiences than their social interactions.

7. Limitations

It is worth noting the likely effect of the interaction, which means that the introduction of an additional variable (s) can deepen the analysis. The study was conducted in banking industry on a sample of people from villages and small towns. Changing the respondent's profile as well as the industry, may lead to a change in the survey results towards a greater importance of CLV.

8. Managerial implications

The results indicate the importance of acquiring creative customers for long-term cooperation (the study was conducted in a group of clients with long bank-customer cooperation history, which is > 9 years). Creative customers are people willingly cooperating with the company. Their identification can therefore be of key importance in building long-term, profitable relationship with customers far beyond their purchases.

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Facing Alexa, the powerful lower their guard: anthropomorphization of smart personal assistants decreases privacy concerns for people with high sense of power

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Abstract:

With rapidly increasing popularity, Smart Personal Assistants (SPA) are becoming prominent characters in our daily lives. Their ubiquity raises concern for data privacy as SPAs may be listening to our most intimate conversations at home. Due to their salient human-like features (e.g., human voice, name) we are inclined to anthropomorphize them. We investigated the influence of anthropomorphization of SPAs on consumer's privacy concerns and the moderating role of sense of power in this relationship. People with high (low) power exhibited lower (higher) levels of privacy concerns when the perceived anthropomorphization was higher. We suggest that high power increases the perceived control and this illusion of control decreases privacy concerns. We extend this result by showing that lower privacy concerns lead to a greater frequency of use. Finally, we discuss the importance of understanding power in relation to increasingly human-like technologies and ramifications for consumer protection.

Keywords: *Smart Personal Assistants, Anthropomorphization, Sense of Power*

1. Introduction

Smart personal assistant (SPA) users have surpassed 100 million in the US alone, which is almost one third of the population of the country. In January 2019, Amazon announced that they have sold 100 million Alexa devices. With such strong penetration rate, smart personal assistants are becoming a prominent character of our daily lives. They run our errands, facilitate our entertainment and recommend us what to buy. Relying on artificial intelligence and natural language processing, they are the latest artifact of digital age that aims to enhance comfort and convenience.

Voice-controlled technologies have been around for some time, but the latest generation of these devices have increasingly human-like features and occupy our most private spaces. Their ability to speak back to us gives them a special status and leads us to attribute human-like features to them (Purington, Taft, Sannon, Bazarova and Taylor, 2017). We have ingrained over-learned rules about how to interact with other people as social beings. Attributing human-like features to non-human entities changes the way we behave towards them (Epley, Waytz and Cacioppo, 2007). It has been reported that 500,000 people have said 'I love you' to Amazon's Alexa and some even perceive Alexa as a companion (Turk, 2016). Anthropomorphized agents are seen as more social beings and people are more likely to cooperate with them (Waytz, Cacioppo and Epley, 2010; Goetz & Kiesler, 2002). On the other hand, anthropomorphization might also lead to greater feelings of discomfort, eeriness and a threat to human identity (Mende, Scott, van Doorn, Grewal and Shanks, 2019). Also, people's risk perceptions are influenced by anthropomorphization (Kim & McGill, 2011). An important distinction of our study from previous work is examining the SPAs, an entity with highly anthropomorphized features yet lacking an established ontological position.

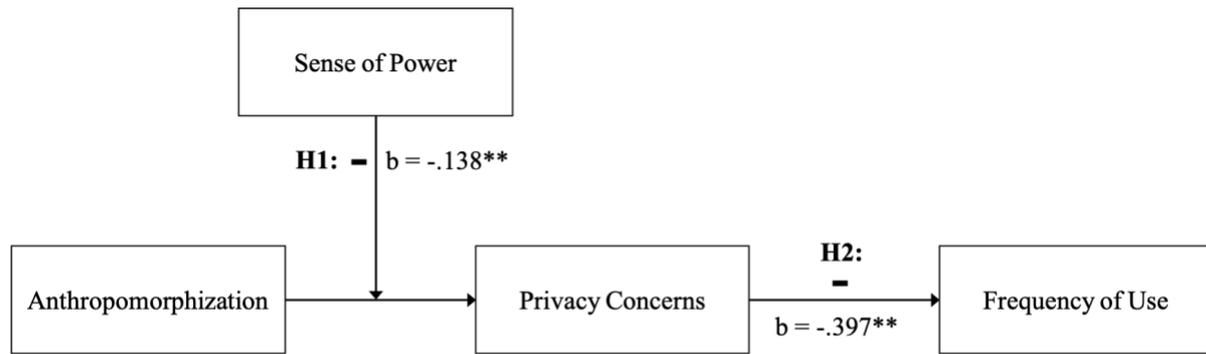
In analyzing the human-SPA relationships, we draw insights from human relationships. We identify sense of power as an important factor that shapes our behavior and social interactions. Literature suggests that when we interact with an anthropomorphized entity, we bring with us our preconceptions and our "default settings" of social interaction with humans. We may not thank a vending machine, but "Thank you, Siri" is apparently a common phrase heard by the SPAs (for a discussion of politeness towards SPAs, see Burton & Gaskin, 2019). This suggests that sense of power which is an important concept in human relationships may potentially extend and influence human to human-like technology relationships.

Just like any new technology, there are barriers to accepting the SPAs in our lives. Perhaps the most relevant of these barriers, given the digital age we are living in, is the privacy concerns. Müller-Seitz, Dautzenberg, Creusen and Stromereder (2009) proposed a revised acceptance model of technology and highlighted security concerns related to the privacy of user data as an important factor in the acceptance and subsequent use of a new technology. With many digital industry giants facing severe criticism over proper use of consumers' data, an 'assistant' residing in your living room, listening to you all day will surely need to tackle the concerns of privacy to be able to hold its place.

In this research, we examine the influence of anthropomorphization of SPAs on people's privacy concerns and subsequent usage frequency as well as the essential moderating role of sense of power in this relationship. We recruited SPA users on an online survey platform and asked them about their habits of use and perceptions of their assistant. Our results showed that sense of power has a negative moderating effect on the relationship between anthropomorphization and privacy concerns. We also show that lower privacy concerns lead to a greater frequency of use. Considering the contextual malleability of power perceptions (Galinsky, Gruenfeld and Magee, 2003), our research highlights the importance of understanding social power in relation to increasingly human-like technologies. The pervasive and almost unescapable use of online technology has sparked increasing concerns related to data privacy (e.g., Banerjee, 2019), vulnerable (i.e., powerless) groups of consumers (e.g., Nunan & Di Domenico, 2019) and digital addiction (e.g., Berthon, Pitt and Campbell, 2019). We believe that our results contribute to a better understanding of the effect of anthropomorphized technologies on consumers and generate interesting implications for the protection of the well-being of the consumer. We contribute to sense of power literature by showing that the role of power in human relationships extends to relations with human-like technologies. This study adds to the previous findings on the interplay between anthropomorphization and sense of power influencing behavior, including our sensitivity to risk (Kim et al., 2011). Finally, we highlight the importance of mitigating privacy concerns in user acceptance of new technologies.

2. Theoretical development

In this section, we build our hypotheses with inspirations from psychology, personality and consumer research literatures on anthropomorphization and its behavioral outcomes (e.g., Epley et al., 2008; Kim et al., 2011; Mende et al., 2019).



Notes. ** $p < .05$ *** $p < .01$ (two-tailed). Unstandardized coefficients reported. Control variables included Age, Income Level, Education Level and Gender. Only gender had a significant effect on privacy concerns, with females reporting higher privacy concerns overall ($b = -.389***$). Gender also had a significant effect on frequency of use, with males using the SPA more overall. ($b = 1.913***$).

Figure 1. Overview of the conceptual framework and the results of the model estimation.

2.1 Anthropomorphization. Anthropomorphization has been defined as attributing human-like features and mental states to non-human entities (Epley et al., 2007; Waytz et al., 2010). We do this almost automatically; as children we speak to our toys endlessly, give them distinct personalities and imagine how they are feeling. Even simple lines resembling a face seem to elicit anthropomorphizing responses (Kim & McGill, 2011). Anthropomorphizing non-human agents has been reported to have positive effects. People were more likely to cooperate with robots that are more human-like (Goetz & Kiesler, 2002), and greater perceived human-likeness of Amazon's Alexa was associated with greater satisfaction (Purinton et al., 2017). An alternative stream of research suggests, however, that human-like features could also lead to aversive responses. The concept of uncanny valley (Mori, MacDorman and Kageki, 2012) proposes that an entity that exhibits human-like features but fails to completely meet the requirements of being a human may elicit feelings of discomfort. A recent work on humanoid service robots provides evidence for this concept by showing that consumer reported greater feelings of discomfort and more compensatory responses when interacting with humanoid service robots (Mende et al., 2019). When the anthropomorphizing cues were reduced (e.g. not giving it a human name, emphasizing that it's a robot), though, the compensatory responses were mitigated.

In our social interactions, we carry certain social expectations and adhere to generally accepted social rules. Literature suggests that we apply social expectations to the interaction when we anthropomorphize the entities (Kim & McGill, 2011). With a non-anthropomorphized entity, our expectations of a social interaction and sensitivity to risk are clearer; so we form accurate expectations according to the machine's settings and non-social disposition. However, with an anthropomorphized entity, we could perceive a mismatch

between the anticipated human qualities and the perceived imperfect qualities. For example, the human voice of a SPA would signal its human likeness, but when you get a generic, scripted answer such as "I'm not sure I understand" several times in a row, you see that the anticipated human quality is imperfect. This mismatch might be realized more saliently especially when the ontological position of the entity is not well established, as in the case of SPAs. Since consumers are all different in their perceptions and expectations in social interactions, it is important to understand how different perceptions lead to different consumer behaviors. Kim et al. (2011) provides evidence for this stream of thought by showing that risk perceptions are influenced by anthropomorphization. We next introduce sense of power and its potential role on our relationships with anthropomorphized objects.

2.2 The Role of Sense of Power. Power is a fundamental concept in social sciences that shapes our social interactions. A large body of literature suggests that power has a pervasive presence, ubiquitous in most aspects of our lives (Keltner, Gruenfeld, and Anderson, 2003; Anderson, John and Keltner, 2012). Power has been defined as the control over valued resources (Fiske, 1993), ability to influence others (Weber, 2009) and ability to do what you want without being influenced by others (French, Raven and Cartwright, 1959; Emerson, 1962). As broad as it is in its definitions, we focus on the social aspect of power; the ability to influence, have control over others, as delineated by Lammers, Stoker and Stapel (2009). In our daily lives, all our relationships function in relation to certain power dynamics (Keltner et al., 2003). Moreover, literature provides evidence that the customs of our social interactions transfer to our interactions with anthropomorphized entities. (Kim et al., 2011) Therefore, we are interested in investigating our relationship with the highly anthropomorphized SPAs in relation to our sense of power.

Kim et al. (2011) has shown that an individual's sense of power moderates the effect of anthropomorphization on risk perception. Specifically, they show that people with low (high) power perceived a higher (lower) risk when the risk-bearing entity was highly anthropomorphized. They propose that those with high power perceived greater control over the anthropomorphized entity. Previous literature provides support for this explanation; people believe they have more control when they have more power over others (Fast, Gruenfeld, Sivanathan and Galinsky, 2009). As their stimuli, Kim et al. (2011) used a casino slot machine with or without physical features that resemble a face (Experiment 1). In the second experiment, they anthropomorphized a disease, phrasing the details of the disease in the way of an anthropomorphized story (Experiment 2). Given that we are readily inclined to

attribute human-like features to non-human agents, we believe that the anthropomorphic nature of the SPA are far from subtle. Even though the SPAs do not have a physical presence (yet!), they possess highly anthropomorphic features such as a human voice and (in some cases) a human name. Although SPAs may not appear as overtly risky as a slot machine or a disease, consumers may consider the underlying risks of using SPAs related to data privacy.

Security concerns related to the privacy of the user data has been shown as a crucial part of accepting a new technology (Müller-Seitz et al., 2009). In their study, Müller-Seitz et al. investigated the acceptance of then new Radio Frequency Identification (RFID) technology and they propose that the overall attitude of consumers toward novel technologies and the intention to use this new technology is strongly tied to the privacy concerns about the use of their personal data. Concerns over consent and the protection of private data directly translate to SPAs. We use SPAs for highly personal tasks, locate them at the center of our living space and connect them with every other ‘smart’ part of our lives. This means data for almost every aspect of our lives, collected and analyzed for making the algorithm, and subsequently our experience, better. Confiding in an entity with such rich personal data would certainly not be without concerns.

We hypothesize:

- H1: Sense of power negatively moderates the effect of anthropomorphization on privacy concerns. Specifically, the effect of anthropomorphization on privacy concerns is more negative (i.e., less concerns) when the sense of power is high.
- H2: Privacy concerns has a negative direct effect on the frequency of use of the SPAs. Specifically, when the privacy concerns are low, the frequency of use increases.

3. Methodology

3.1 Measurements

The measurements included scales from prior research, with appropriate adjustments to the context. The 8-item Anthropomorphization scale was adopted from Epley, Akalis, Waytz and Cacioppo (2008). The 8-item Sense of Power scale was adopted from Anderson & Galinsky (2006). Privacy concerns were measured with 4 items asking about concerns related to personal data. Frequency of use was measured using 5 items. The frequency of use question was broken down into five categories to ensure that users think exhaustively of their use of the SPA (Entertainment, Personal Organization, Seeking Information, Device Management, Purchase-related).

Subsequently, a questionnaire was created on online survey software Qualtrics and all the items were pre-tested to ensure the understandability of the questions. Survey participants responded to seven-point Likert scales anchored at "strongly disagree" (1) and "strongly agree" (7) for Sense of Power and Privacy Concerns measures; "not at all" (1) and "very much" (7) for the Anthropomorphization measure. The frequency of use measures provided 8 choices from 'Never' (1) and Less than once a day (2) to More than 5 times a day (8).

We argue that using survey data provided us with high external validity, as we included only real SPA owners in this data set. This ensured familiarity of the products and a more realistic context to investigate the phenomenon. In a fictive scenario or a lab experiment, capturing the privacy concerns might have been less reliable. Instead of imagining a privacy rating, our participants are active users of SPAs and their data provides us with a first-hand, directly experienced information on privacy concerns. We believe that this approach is able to provide results with high validity.

3.2 Data Collection and Sample

400 participants were recruited from online survey platform Prolific. Currently owning a home assistant (e.g. Amazon Echo, Google Assistant) was used as pre-screening criterion. This pre-screening was provided by the platform by default. Four participants were excluded from the analysis due to facing technical problems during the survey resulting in incomplete recording of data. The final sample contained 396 usable responses. Participants included 62.1% women with overall sample age ranging from 18 to 78 (mean age: 35.6).

3.3 Results

To test our conceptual model we used structural equation path modeling by using a maximum likelihood estimator. We specified the model as depicted in Figure 1. Results of our model show that there is a negative moderating influence of sense of power on the effect of anthropomorphization on privacy concerns (H1: $\beta_1 = -.138, p < .05$). This confirms our hypothesis, showing that people with high (low) sense of power have decreased (increased) privacy concerns when the degree of anthropomorphization is high. This effect is shown in the interaction plot in Figure 2. Moreover, our results confirm that greater privacy concerns decrease the frequency of use (H2: $\beta_2 = -.397, p < .05$). However, Anthropomorphization and Sense of Power did not have direct effect on privacy concerns. Control variables Age, Income and Level of Education also did not have any influence on the privacy concerns. Gender had a significant effect on privacy concerns, with being female predicting higher privacy concerns

($\beta_3 = -.389, p < .01$). Gender also had a significant effect on Frequency of Use, with males using the SPA more overall ($\beta_4 = 1.913, p < .01$). Results of the model estimation are shown in the conceptual framework on Figure 1 (Model Fit Information: *CFI*: .862; *TLI*: .654; *RMSEA* = .045).

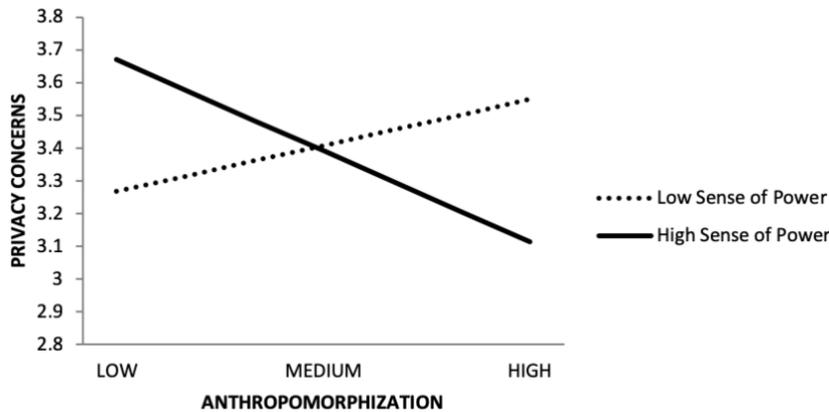


Figure 2. The interaction plot for the moderating effect of sense of power on the relationship between anthropomorphization and privacy concerns.

4. Discussion

Previous work has shown the influence of anthropomorphization on consumer behavior. Our first contribution is to investigate this established phenomenon in the context of risks associated with Smart Personal Assistants. Nowadays with an intimate place in our homes, it is important to understand this highly anthropomorphized technology. In the digital age we're living in, consumers are increasingly worried about the protection of their personal data. It's all very new; most consumers don't even have a clue about how to be protected against the negative consequences of online technologies. Major platforms are heavily criticized for not taking the issue of privacy protection seriously and governments are starting to come up with regulations on protecting the privacy of the consumer. We suggest that Smart Personal Assistants may indeed have a special status, often perceived to be more than an algorithm. We believe that consumer relationship with SPAs is a fruitful avenue for future research.

Second, drawing from the literature on the important role of power in human interactions, we bring sense of power into the discussion to probe into consumers' perception of the SPAs (Keltner, Gruenfeld, and Anderson, 2003; Anderson, John and Keltner, 2012).

We suggest that, just as influential as it is in human interactions, sense of power may indeed play a crucial role in shaping consumer perceptions and interactions of the SPAs. We provide evidence for the moderating role of power on the relationship between anthropomorphization and privacy concerns. In line with previous work, we suggest that high power increases the perceived control over the entity and this illusion of control decreases the privacy concerns (Kim et al., 2011). Understanding the role of sense of power in relation to SPAs might have important practical implications for marketers because power perceptions are highly susceptible to influence. Therefore, the fact consumers might be easily manipulated in line with the strategies of marketers is a worrying implication.

Finally, our results give insights into privacy concerns related to emerging technologies that are far from being completely understood. A better understanding of consumers' relationship with the anthropomorphized technologies will also generate important implications for the protection of the well-being of the customer.

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Children's food well-being: The influence of parents and school on food literacy

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Abstract:

The discussion of issues related to the eating behavior of children and adolescents has gained worldwide relevance in recent years. For instance, the problem of childhood obesity has significant impact on the individual and also on society. This paper analyzes the influence of parents and school on the food literacy of children and adolescents, contributing to the Transformative Consumer Research in the understanding of food well-being, more specifically regarding food literacy. We conducted qualitative research combining open-ended questionnaires answered by students aged 10 to 14 years with interviews with school coordinators. Results show that to some extent parents and children talk about food. However, this dietary dialogue still occurs predominantly from the perspective of health / nutrition. Additionally, schools lack a more active role in promoting food literacy among students.

Keywords: *well-being, food, literacy*

1. Introduction

The discussion of issues related to the eating behaviors of children and adolescents has gained worldwide relevance. Great part of this discussion has focused on childhood obesity and its impact on the individual and society (Ebbeling, Pawlak, & Ludwig, 2002; Koplan, Liverman, & Kraak, 2005). In emerging countries, such as Brazil, this discussion is also present. For instance, the advertising of unhealthy food for children and adolescents has been questioned by society and regulated by the government (Resolução n. 408, 2009; Resolução n. 163, 2014), and the sale of food in schools started to be regulated in some states and cities (Decreto n. 36.900, 2015; Decreto n. 56.913, 2016; Lei n. 4.352, 2016).

This topic has been widely discussed by researchers from different areas, such as Nutrition, Public Health, Psychology, and Marketing. These researchers have focused on several topics, such as the nutritional quality of the diet of children and adolescents (Bueno, Fisberg, Maximino, Rodrigues, & Fisberg, 2013; Fisberg, Del'Arco, Previdelli, Tosatti, & Nogueira-de-Almeida, 2015), eating disorders in childhood (Naderkoorn, Dassen, Franken, Resch, & Houben, 2015), and how children and adolescents are influenced in the choice of food they eat, which includes the impact of advertising (Dixon, Scully, Wakefield, White, & Crawford, 2007; Boyland & Halford, 2013), the school environment (Lakkakula, Geaghan, Wong, Zanovec, Pierce, & Tuuri, 2011; Osborne, & Forestell, 2012), and the role of parents (Videon & Manning, 2003; Khandpur, Charles, Blaine, Blake, & Davison, 2016).

Block et al. (2011, p. 6) defined as food well-being “positive psychological, physical, emotional, and social relationship with food, both individually and collectively.” This idea exists within the scope of Transformative Consumer Research (TCR), a movement gaining momentum in the area of Consumer Behavior (David, Ozanne, & Hill, 2016). Our study builds on children's socialization theory, which posits that children's development on the consumer level happens through socialization agents, such as parents, schools, peers, and the media (John, 1999). One key element, within the scope of food-well being, is the development of food literacy, hereby understood as the use of knowledge to maximize food well-being (Block et al., 2011; Bublitz et al., 2011). Since eating habits of children and adolescents are intermediated and influenced primarily by parents and school, we investigate the influence of these actors on the level of food literacy of children and adolescents.

2. Literature Review

2.1 Consumer Well-Being and TCR

The idealized notion of a “good life” has been studied in domains and have long been of human interest (Mick, Pettigrew, Pechmann, & Ozanne, 2012). Recent developments in marketing literature point out to the importance of consumer well-being as a significant development of marketing theory. Studies focusing on consumer well-being date to the same time the concept of marketing as a profession and academic activity were developed (Pancer & Handelman, 2012). Interestingly, the term consumer well-being was used only in the 1970s when the idea of Macromarketing was introduced (Pancer & Handelman, 2012). From that time on, studies and concern for consumer well-being advanced, culminating, in the mid-2000s, with the organization of a movement entitled Transformative Consumer Research (TCR). This term emerged to designate consumer behavior research that focuses on the well-being of individuals and societies (Mick, 2006). Nowadays, this movement engages researchers around the world in research that focuses on topics such as consumer vulnerability, diet, and obesity, gambling and organ donation (Davis, Ozanne, & Hill, 2016). Because it involves different areas of knowledge, the study of consumer well-being is very complex and ends up becoming quite fragmented (Mick et al., 2012).

2.2 Food Well-being

In the context of TCR, the idea of food well-being arises and is defined by Block et al. (2011, p. 6) as “positive psychological, physical, emotional, and social relationship with food, both individually and collectively.” The authors suggest changing the study of diet from a health / nutrition perspective, proposing that a diet should be understood as a factor that impacts well-being more broadly, and propose five components of food well-being: food socialization, food literacy, food marketing, food availability, and food policy.

Still in the TCR paradigm, Bublitz et al. (2011; 2012) present food well-being as a continuum and propose five parameters, similar to the five components previously proposed by Block et al. (2011), to define where each individual is in this continuum: social factors, economic issues, food literacy, emotional knowledge, and physical and psychological traits. This research focuses on food literacy.

2.3 Food Literacy

The food literacy parameter includes, in addition to nutritional knowledge, the use of this expertise to maximize food well-being (Block et al., 2011; Bublitz et al., 2011; 2012). Shared by Bublitz et al. (2011; 2012), Block et al. (2011) proposed that food literacy has three

main components: 1. conceptual or stated knowledge, the notion of what is healthy eating; 2. procedural knowledge, that is, knowing what is needed to advance towards food well-being; and 3. the ability, opportunity, and motivation to practice healthy eating habits.

Finally, Vidgen and Gallegos (2014, p. 54) define food literacy as “a set of interrelated knowledge, skills, and behaviors needed to plan, manage, select, prepare and eat as needed, determining food intake.” The components of food literacy are separated into four major groups: 1. Plan and manage; 2. Select; 3. Prepare, and 4. Eating (Vidgen & Gallegos, 2014). Similar to Vidgen and Gallegos (2014), Pendergast and Dewhurst (2012) point out that it is in childhood that the process of food literacy begins and suggests that this is a determining period in the relationship that the individual will establish with food throughout his or her life. The main influences children receive come from parents, teachers, food companies, and schools (Pendergast & Dewhurst, 2012).

3. Method

Consistent with the objective of discussing the influence of parents and school on the food literacy of children and adolescents, the methodology adopted in this research is exploratory with a qualitative approach, with specific support of descriptive statistics.

We developed two data collection instruments, one for children (a questionnaire with open-ended questions) and an interview script (for pedagogical coordinators). The questionnaire was applied with children aged 10 to 14 years, and focused on three main points: (1) “What do you think healthy eating means?”; (2) “Do you have a healthy diet?”; and (3) “Do your parents talk to you about food? What do they tell you about this subject?” We pre-tested the questionnaire with a class of students within the target age range of the survey and made some fine-tuning to the wording of questions in order to enhance comprehension. We collected 385 valid questionnaires during June 2016 in two private schools in Sao Paulo, chosen due to their size and availability.

Additionally, we conducted interviews with pedagogical coordinators from each school. These interviews were based on food literacy components proposed by Vidgen and Gallegos (2014), the definitions of Block et al. (2011), and Bublitz et al. (2011; 2012) for the food literacy parameter within TCR. The interviews were transcribed for further analysis.

To analyze the data, we used content analysis based on the methods proposed by Bardin (2009) and Bernard and Ryan (2010). In the case of the interviews, according to Scagliusi, Pereira, Unsain, and Sato (2016), we cut the excerpts from the interviews

containing the words “school” and “college” and extracted them for analysis. The analysis of the answers to the open questions of the questionnaire was performed by two of the researchers. Individually, we analyzed the answers and suggested categories for the classification of the subjects identified in each answer. Then, the categories were discussed with a third researcher. Some were merged until we reached a total of 10 categories as described in Table 1. Finally, we classified the answers according to the defined categories. This final process was repeated three times until there was adequate agreement on the ratings.

Table 1 – Categories and Descriptions

CATEGORY	DESCRIPTION
Normative / Restrictive	Suggest what you can and cannot eat, characterizing the definition of rules.
Health	Represent well-being, disease prevention, and concern for the future.
Physical activity	Relate eating to sports and physical activities.
Variety / Balance	Emphasize the importance of eating a variety of foods and eating balance.
Lose weight / Gain weight	Expressions related to food that influences weight gain or loss.
Quantity	Emphasize how much is eaten for both excess and neediness.
Time / Frequency	Expressions related to eating at the right time or at a certain frequency.
Fruits and vegetables	Quotations that deal with fruits and vegetables.
Water	Relate food to water intake.
Generic answers	Vague or very comprehensive answers.

4. Results

Of the 385 questionnaires analyzed, 198 (52%) respondents were male and 186 (48%) female. One of the respondents did not answer this question. Regarding the age of the respondents, 90 (23%) were 10 or 11 years old, 295 (77%) were between 12 and 14 years old. We grouped ages in this way based on the Child and Adolescent Statute (ECA, 1990), which regulates the rights of children and adolescents in Brazil. A person under 12 years of age is considered a child; between 12 and 18 years, they are considered teenagers (ECA, 1990).

4.1 Opinion of Children and Adolescents

To analyze the question “What do you think healthy eating means?” we considered the percentage of appearance of each category in the responses. The category “Fruits and vegetables” stood out, appearing in 30% of responses. This points to what Block et al. (2011) present as the old dietary paradigm, in which specific foods are associated with the idea of healthy eating. On the other hand, the category “Variety / Balance” was the second most frequent in the answers (19%). This category is more in line with Block et al. 's proposal for food well-being, in which healthy eating is associated with the positive relationship of individuals with food.

Splitting children and adolescents by gender, it is possible to identify some associations in relation to classification ($\chi^2 = 15.88$; $p = 0.07$). The "Quantity" category is the third most present in girls' answers (17%), while in boys' answers, this category is the fourth (13%). Responses related to the "Time / Frequency" category are more present in girls (5%) than boys (3%). Thus, it is possible to notice paternalistic characteristics more present in the girls' answers, evidencing the old paradigm of feeding described by Block et al. (2011).

Grouping responses by age (children and adolescents), it is possible to observe some associations ($\chi^2 = 30.68$; $p = 0.0003$). The most noticeable difference is in the "Fruits and vegetables" category, present in 42% of children's responses versus 27% in adolescents' responses. Conversely, responses related to the "Variety / Balance" category are present in 12% of children's responses and 21% of adolescents' responses. This can be positively analyzed, since, as previously explained, this category can be framed in the old food paradigm, while the "Variety / Balance" category is related to the food well-being paradigm. That is, when entering adolescence, it seems that the individual becomes more associated with healthy eating and food well-being and less with paternalistic patterns of the old view of eating (Block et al., 2011).

When asked if they had a healthy diet, most children and adolescents (61%) answered "Sort of," while 26% answered "Yes," 11% "No" and 2% "Don't Know." The low percentage of "Don't know" answers is quite interesting, as it shows that children and adolescents have an opinion about their own diet. No significant differences were observed in response patterns grouped by gender and age.

4.2 Parental Influence

Pendergast and Dewhurst (2012) understand that parents are the most important influence on food literacy of children and adolescents. Eighty-one percent of the students surveyed answered "Yes" when asked if their parents talked to them about food. This corroborates the authors' statement. In addition to this question, the influence of parents was analyzed from the answers to the question "What do they tell you about this subject [food]?". Disregarding the category "Generic Responses" (19%), the three categories most present in the answers are directly linked to the old view of eating: "Health" (21%), "Normative / Restrictive" (18%) and "Fruits and vegetables" (16%). That is, when talking to parents about food, children are exposed to imposition of rules and indications of what they should or should not eat, characteristics that do not align with the idea of food well-being.

To reinforce this mismatch, the "Variety / Balance" category, which is the closest category to food well-being, appears in only 8% of the responses of children and adolescents. There were no significant differences when comparing the means of grouped answers (neither by gender nor by age). In contrast to what we observed in the healthy eating responses of children and adolescents, it appears that parents are not yet prepared to talk to their children about eating in the context of food well-being. Thus, we can assume that the categories related to food well-being present in children's opinions may be due to the influence of the school.

4.3 School Influence

Both respondents agree that the eating habits of children and adolescents at school are different and worse than their eating habits at home. One respondent commented that students take advantage that their parents are absent and consume food they do not eat at home. He illustrated this comment with the speech of a child: "Ah, I buy this candy here at school because my father doesn't let me." The other coordinator mentioned that snacks brought from home tend to be healthier than the ones children buy from the canteen.

When evaluating how the school environment and peers influence children's habits, both coordinators believe that this occurs, especially within the age range of our respondents. One of them commented that it is at this stage that children begin to understand the school routine and that "from this school routine, there is a very large influence of peers also on what they eat and what they do not eat."

The influence of school on food literacy is considered by both respondents to be very large, and both of them acknowledge that schools need to be more active in reinforcing food literacy. One of them believes in actions within the classroom: "there must really be something in the school curriculum that focuses on these practices."

The importance of parents in the food literacy of children and adolescents was quite recurrent in the interviewees' statements. One of them declared that "it is an important job to do with the student, but it is an important job to do with the family as well." The other comments that "guidance is the best way, here at school and at home, too, with parents, which has an important role in this regard."

5. Final Considerations

The purpose of this paper was to analyze the influence of parents and schools on food literacy of children and adolescents, contributing to the understanding of the concepts of food

literacy and healthy eating. This work contributes to the advancement of TCR by exploring the parameter of food literacy present in works dealing with food well-being (Block et al., 2011; Bublitz et al., 2011; 2012). Part of this contribution was made possible by bringing the work of Vidgen and Gallegos (2014) to the context of TCR, showing the importance of interdisciplinarity that TCR itself points out as fundamental for the advancement of this academic movement.

The analysis of children's and adolescents' opinions about food indicates that they are influenced by their parents and school, as pointed out by Pendergast and Dewhurst (2012). The presence of the concept of food well-being (Block et al., 2011) within the discourse of children and adolescents is a positive sign, because it indicates a movement towards food well-being, considering the continuum proposed by Bublitz et al. (2011; 2012). On the other hand, the strong presence of characteristics of the old food paradigm (Block et al., 2011) in parent-child conversations about food is a warning sign, as it suggests a negative movement in the food well-being continuum presented Bublitz et al. (2011; 2012).

The influence of schools on the food literacy of children and adolescents became evident in the statements of the interviewees, as we pointed out in the analyzes. However, the results indicate that schools could be more active in this regard, as children and adolescents tend to eat better at home than at school. In this sense, there seems to be room for schools to develop food education projects that involve not only children and adolescents, but also parents. With integrated actions, positive changes in infant feeding can be enhanced.

The main limitation of this research is that we focused on the part of the socialization agents. We suggest a similar survey, interviewing other socialization agents, such as parents or extended family, as suggested by Commuri and Gentry (2000). Other groups and organizations, such as the Church, Boy Scouts of América, or sports centers for recreation can be of significant influence. More attention is needed to the interplay of these influences and how they inhibit each other.

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The role of communities in sustainable consumption and well-being: literature review

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Abstract:

This paper introduces the theoretical framework of a multi-year research exploring the role of communities in transition toward sustainable consumption. Previous research did not address how community membership possibly informs, inspires, encourages and instructs individuals in developing sustainable lifestyles. To address this gap we design the conceptual foundations for the inquiry on communities as drivers for sustainability, and as factors contributing to members' well-being. To do so we connect the concepts of sustainable consumption, well-being and community, and illustrate their relationship to each other. We position our paper within the approach of marketing research which deliberately engages for social change.

Keywords: *sustainable consumption, well-being, communities*

1. Introduction

Current paper is a response to the call for “challenging the status quo in marketing research in the transitional markets of the New Europe.” raised by the European Marketing Academy (2020). The starting point which guides our research is the Responsible Research in Business & Management’s (RRBM) initiative which defines responsible research as beyond producing reliable and valid knowledge, science should be more socially engaged and socially responsible than is advocated by the value-free ideal (Tsui, 2016). The RRBM approach instructs our topic selection and problem formulation. Accordingly, we introduce our multi-year cooperative inquiry research project on the role of communities in transition toward sustainable consumption. Our approach is certainly not without precedent in marketing. Lefebvre’s (2013, p.5) concept of social marketing, which is “a systematic approach to thinking about and solving the wicked problems our world faces”, and the quality-of-life marketing endorsed by Sirgy (2002, p.11), who argues that marketing science is “the science of positive social change” are examples of RRBM-like approaches. Accordingly, we position our paper within the framework of marketing research which deliberately engages for social change. In the paper we introduce the basic concepts of our research, such as sustainable consumption, well-being and community, and their relationship to each other. We aim to challenge the status quo through our research process - following the approach of the lifestyle movement framework, suggested by Haenfler, Johnson and Jones (2012) – by (1) studying lifestyles that have a goal of social change; (2) evaluating the impact of pro-environmental behaviour and (3) aiming to further foster small communities to develop sustainable consumption practices through participatory methods. Current paper establishes the theoretical framework for our research project.

As Capra and Luisi (2014, p. xi) phrase it, a “sustainable society must be designed in such a way that its ways of life, businesses, economy, physical structures, and technologies do not interfere with nature’s inherent ability to sustain life.” Natural sciences research on Earth’s ecosystems has shown the radical degradation in Earth’s capacity to support life as we have known it (for example the relatively favorable conditions for agriculture) (IPBES, 2019). The loss of nature is driven by multiple socioeconomic processes (Shrivastava et al., 2019). One such process is consumption – therefore we position consumption in the center of the (un)sustainability problem.¹

Accordingly, ecological economists Spash and Dobering (2017, p. 203) argue that shifting from the “material and energy intensive economies and lifestyles” toward an environmentally sustainable society is one of the main challenges ahead. Indeed, the magnitude of the task is enormous: in their article O’Neill, Fanning, Lamb, and Steinberger (2018) - published in *Nature Sustainability* - found that of 150 countries looked at, not one society meets basic needs for its citizens at a globally sustainable level of resource use. Even if efforts are taken, gaps between intentions and impacts are occurring (Csutora, 2012). Herman Daly (2007) offers one

¹ As social scientists we acknowledge that inequality is a major issue regarding the responsibility of the destruction of nature’s inherent ability to sustain life. Due to the focus of our research and space constraints we don’t address inequality in this paper.

explanation for the failure: the focus on efficiency gains decreases the cost of production, which instead of reducing, will likely increase the production, thus the usage of the required resource increases (as explained by the rebound-effect). Therefore, sustainability cannot be addressed solely by (often relying on technological means to) the increase of efficiency; to reduce society's material metabolism the decrease in total material footprint is inescapable.

Current paper builds the theoretical framework to open up space for the inquiry on communities as drivers for sustainability and factors contributing to members' well-being. The framework is developed as follows. Section 2 calls to examine consumption's role in relation to well-being and sustainability. Section 3 builds on the literature speculating whether, and if so how can consumption be a pro-ecological act. Section 4 argues for the need to view individuals and their actions as embedded into, and influenced by community membership.

2. Materialism, well-being and sustainability

Halberl, Fischer-Kowalski, Krausmann, Martinez-Alier and Winiwarter (2009) historical research shows how different forms of societies operate on a different magnitude of material consumption. The transition from agrarian to industrial represents a material intensity increase from anywhere from 2.5 to 8.3 times Gutowski, Cooper and Sahni (2017). Wiedmann et al. (2015) demonstrate that as a country's socioeconomic metabolism shifts from agricultural to industrial production, the domestic extraction of materials decreases, but - due to the increased level of international trade - the overall mass of material consumption generally increases. It implies that as wealth grows consumption becomes increasingly resource intensive, turning the economies deeper down the unsustainable trajectory.

Material reduction goes against the very core principles of Western economics, which are organized according to Boda, Fekete and Zsolnai (2009) around (i) profit-maximization, (ii) cultivating desires, (iii) introducing markets, (iv) instrumental use of the world, and (v) self-interest based ethics. Progress, development is associated with the GDP index, which measures market transactions in a given period; "the more the better". But, as for example Gutowski, Cooper and Sahni (2017, p.13) argue, "[in] spite of the clear historical trends relating materials use with economic development, it is necessary that we consider alternative metrics and relationships between human well-being and materials. Both the measure of GDP and the activity of material consumption can be challenged as contributors to human well-being." Accordingly, psychologist Tim Kasser (2002, p.22) states: "[people] who are highly focused on materialistic values have lower personal well-being and psychological health than those who believe that materialistic pursuits are relatively unimportant. These relationships have been documented in samples of people ranging from the wealthy to the poor, from teenagers to the elderly, and from Australians to South Koreans." This phenomena is described by the Easterlin-paradox, namely that after reaching a certain level of material welfare (income) it does not increase subjective (perceived) well-being further. Therefore, the material-orientedness of economic development, after a certain threshold level, should be questioned, if one assumes that the purpose of economic activity is well-being (Easterlin, 2003). O'Neill,

Fanning, Lam and Steinberger (2018) conclude that qualitative social goals, such as increase in life satisfaction could be pursued using non-material means.

Materialism is an integral part of the human goal and value system, which in Burroughs and Rindfleisch's (2002) study fell within the cluster of self-enhancement values for power and achievement; it was also nearby values for hedonism and stimulation. At the same time, materialism stood in relative conflict with collective self-transcendent values religiosity, benevolence, family, community, universalism, and conformity (Kasser, 2016). It implies that materialism and non-materialism as value and goal systems are in conflict with each other and the crowd-out effect can be recognized in their relationship. Indeed, Kasser, Cohn, Kanner and Ryan (2007) demonstrate that the more a nation organizes its economy around corporate capitalism, the more its citizens will value materialistic aims such as money, power, status, achievement, and the less its citizens will value aims such as egalitarianism, harmony, community feeling. Materialism refers to that individual belief that purchasing and possessing goods leads to increased happiness and life satisfaction while non-materialism is the refusal of such belief (Lee & Ahn, 2016). Consumption doesn't necessarily add to well-being.

Linking materialism, wellbeing and sustainability Kasser (2017) finds that frequent engagement in pro-ecological behaviours is positively correlated with personal wellbeing. Kasser comes up with "three possible explanations for the compatibility of pro-ecological behaviours and wellbeing: (i) engaging in [pro-ecological behaviours] leads to psychological need satisfaction, which in turn causes [wellbeing]; (ii) being in a good mood causes people to engage in more prosocial behaviours, including [pro-ecological behaviours]; and (iii) personal characteristics and lifestyles such as intrinsic values, mindfulness and voluntary simplicity cause both [pro-ecological behaviours] and [wellbeing]." In our framework pro-ecological behaviour is a concept containing a wide range of sub-concepts, of which sustainable consumption is one. In the next section we overview the literature, whether consumption can be, and if so how, a pro-environmental act.

3. Sustainable consumption

Sustainable consumption - defined as a conscious form of behaviour in relation to consumer goods, limiting or rather reducing the environmental impact of consumption (Schaefer & Crane, 2005) - is one key concept which has been researched extensively in relation to subjective well-being (see for example; Kasser, 2009; Corral-Verdugo, 2011; Xiao, 2011; Neulinger et al., 2020). Regarding sustainable consumption several approaches have been developed.

Green consumption is an intent to purchase products (and services) which are considered to be environmentally friendly, e.g. buying fair trade products, organic produce or ecological detergent (Zralek & Burgiel, 2020). According to Helm et al. (2019) green consumption does not require change in consumers' lifestyle because it is embedded in consumerist culture. It encourages consumers to purchase goods with less environmental impact, inspires consumers

to express their values (e.g. caring for environment) through their acquisitions – through the market, but it does not question the need for new goods and thus the environmental impact of the overall consumption.

Non-consumption or reduced consumption – in contrast to green consumption – refers to buying and owning less than one could afford. Deciding not to purchase goods, but repairing and using old ones instead of replacing them with environmentally friendly new ones represents a shift from a materialistic lifestyle (Helm et al., 2019). Non- or reduced consumption can be performed due to financial reason, recently however, non-consumption has been explored as a reference of the rejection of consumerist culture and to “live less materially” (Miller 2010, 71 in Nixon, 2020 Pp. 45.; Helm et al. 2019).

Even though not buying goods can have a significant effect on reducing material needs of economic production, studies related to non-consumption rather focus on more visible, and more spectacular acts, such as demonstrations or boycotts (Nixon & Gabriel, 2016). These activities – when consumers are seen as activists – fit better the dominant theory of consumption where consumers are engaged in rather than absent from something (Nixon, 2020). Recently however, studies started to discover non-consumption for sustainability as a choice of ‘not to buy, own or use’ - avoiding consumerism rather than participating in a movement (Wilk, 1997, 181 in Nixon, 2020, p.45). Nixon (2020) refers to non-consumption as “an umbrella term for the range of social phenomena that includes forms of inaction, non-participation or withdrawal from the full gamut of cultural practices under consumerism” (p. 45).

Similarly to Nixon’s (2020) definition, non-consumption practices are often framed as anti-consumption or consumer resistance (Cherrier, Black & Lee, 2011). Anti-consumption is explained by Cherrier, Black and Lee (2011) as a consumer act motivated by environmental and social considerations, but also by personal ones such as seeking development of self-identification. In this sense, searching for a better life does not involve acting against consumerist culture, but rather pursuing ways which contribute to individual fulfilment within the consumer society. Supporting this argument Lee and Ahn (2016) add that the refusal of goods of anti-consumers can be limited to certain products or brands. As Lee and Ahn (2016) explains, a consumer can reject buying furniture in IKEA motivated by perceived irresponsibility of multinational companies or bad personal experiences, but the same person might not reject buying furniture from local producers, thus not rejecting completely the idea of material possession.

In contrast, consumer resistance usually concerns resisting against a universal ‘antagonist’ (Cherrier, Black & Lee, 2011, p. 1759) who is considered to be dominant (e.g. multinational companies). Consumer resistance for sustainability concerns broader goals outside of the micro environment of individuals, and resistant consumers often evaluate commodities according to universal characteristics (e.g. all multinational companies are perceived as irresponsible).

While Cherrier, Black and Lee (2011) explore intentional non-consumption, Nixon (2020) reveals further, incidental pressures (beyond intentional choices) which drive individuals to

buy less than one could afford. These include frustration caused by overwhelming information (e.g. advertisements), avoid manipulation of the market, feeling of confusion and incompetence (e.g. getting lost in the supermarket or in the parking area). Similarly, Nixon and Gabriel (2016) identified cases where non-consumption takes place to avoid emotional harm. In case of their informants consumption causes real anxiety; beside physical dangers, e.g. being lost, losing parking tickets interviewees described feeling ill, nauseous and painful, heavy breathing caused by frustration of the need to go shopping, or by being overwhelmed by their own desire (wanting to buy) which leads to conflicting, ambiguous (negative) feelings. In these cases consumerism is seen as dirty, market places are polluting and in contrast, not consuming is considered to be clean and pure.

Overlooking the literature of sustainable consumption we see divergent and often contrasting approaches ranging from the “what to buy?” all the way to the “sustainable consumption is an oxymoron, as markets have no respect towards ecological limits”. Just like all disciplines, marketing will have to internalize ecological literacy - as for example Kotler, Kartajaya and Setiawanv (2010), Lefebvre (2013) and Sirgy (2002) suggest - to address the most pressing sociological issues. In the next section we outline one possible approach which merges marketing research with ecological concerns.

Individuals as consumers are part of a larger system and consumption patterns are embedded in a broader cultural and institutional context (Maniates, 2014). Both Maniates (2014) and Spash and Dobering (2017) argue that taking the individual as the unit of analysis – as it occurs in consumer-studies – is un- and counterproductive. First, viewing the individual as a consumer whose only range of action is through the market by their acquisitive decisions neglects a wide array of actions (such as non consumption practices) which could be a more effective way to move out from the materialistic lifestyle and reduce consumption footprint. Second, focusing on the individual might consider action to be of small significance on a systemic scale. Emphasizing the individual responsibility in regards to sustainability denies the role of institutional and political context which define the conditions of consumerist society and therefore restrict individual action (Spash & Dobering, 2017). Contrary to the individual level, prior studies demonstrate that communities are among the major driving factors toward sustainability (Kiss, Pataki, Köves & Király, 2018). Therefore, we aim to learn how communities can affect individual's consumption practices related to sustainability.

4. Role of communities in sustainable consumption

According to McAlexander, Schouten & Koenig (2002) communities are spaces where meaning is negotiated and created. Such group meaning and the standards of the group can have an affect on individual behaviour (Lewin, 1947). Many studies claim that community-based action targeting sustainability might succeed to change behaviour, attitudes and understanding on sustainability issues (for example Staats, Harland & Wilke, 2004, Middlemiss, 2011). Community-related commitment plays a significant role in pro-environmental behaviour which can be developed due to the social influence of a community

(Hofmeister-Tóth, Kelemen. & Piskóti, 2012; Staats, Harland & Wilke, 2004). Based on this line of thought we argue that communities can contribute to develop sustainable consumption as a form of pro-environmental behaviour. Change is more likely - according to Middlemiss (2011) -, if focus is on the participants' lifestyles, requiring the individual's active involvement in the life of a cohesive community. Forno and Graziano (2014) demonstrate that individuals receive emotional, cognitive and practical support from the group by being members and participating in the shared meaning making processes.

5. Summary

Summarizing, in our paper it has been demonstrated that 1) strong communities can have a significant role in transition toward sustainable lifestyle and a significant impact on individuals pro-environmental behaviour; and 2) individuals' pro-ecological behaviour is positively correlated with personal wellbeing. Our starting point is that action is individual, but possibly informed, inspired, encouraged and instructed by group membership. In our ongoing research project we initiate inquiry groups (called eco-teams) following the methodological approach of the co-operative inquiry. Co-operative inquiry, within the family of participatory research, aims to design a safe communicative space where people with similar interests and motivation can share and reflect on their experiences and their knowledge in order to better understand and to change their behaviour (Heron, 1996; Reason, 2006). We aim to deepen our understanding on how engagement in communities related to sustainability can contribute to individuals' sustainable consumption practices and well-being; and turn the knowledge gained into practical outcomes. As a result of the complete, multi-year research process, we aim to reveal the relationship between sustainable consumption, community and well-being.

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Exploring the implications of Consumer Use of Voice Search Technology on Marketing Practice

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Abstract:

The purpose of this conceptual paper is to explore the implications of consumer use of voice search technology on marketing practice. Voice search technology essentially allows consumers to search the internet or apps via voice command for products and therefore heralds a change in online consumer search behaviour. Notably differences include a shift from typed to spoken queries consisting of key sentences rather than keywords and the tendency to use unbranded, and near me search (Chatmeter, 2018b). The literature base consists mainly of practitioner press making predictions about the future of voice search technology. This paper adds to knowledge on this exploratory topic by proposing a conceptual framework which outlines key characteristics of consumer voice search behaviour and the implications for marketing practice.

Keywords: *consumer behaviour, voice search technology, smart assistant modality*

“Recently, my 4-year-old daughter picked up my old Timex watch. After playing with it for a few minutes, she discovered that the face of the watch lit up when she pushed a button on the side. She grew excited and told the watch: “Call Grandma Hall!” Needless to say, my mother’s face did not appear on my aged Timex, which disappointed her greatly” (Hall, 2018, para 4).

1. Introduction

Nowadays children are growing up talking to smartwatches, smartphones, and smart speakers. But not just children, people of almost every age are ordering food, shopping online, checking the weather forecast, controlling other devices, and scheduling tasks via their voice assistants. Recent research found that 65% of smart speaker owners state they do not want to live without their assistant anymore (Social Report, 2018). Furthermore, trend research expects “a future of voice-activated everything, from alarm clocks to refrigerators, lightbulbs, mirrors, and microwaves” (Vogel, 2019, para 1). Subsequently, experts are convinced that voice-enabled advertising will make its way to smart assistants, just like Google AdWords but in an audio version. Ismail (2018) projects it is only a matter of time before firms like Amazon unveil an advertising option for virtual digital assistants such as Alexa. Currently, when talking about voice search, it mostly involves one of two devices: smartphones or smart speakers. Users either talk to, for example, Siri on their iPhone or Alexa on their Amazon Echo smart home assistant. Consumer search behaviour using smart assistants is different, denoting a shift from typed to spoken queries, and as a result marketing practitioners need to respond. But what does the rise of smart voice technology, a term suggested by Mendez (2019) to stress the intelligence of voice technology, mean? Many newspaper articles, blog entries, expert predictions and guidelines have been written about voice search and how it will influence marketing and business. However, to-date academic research tends to focus mainly on the technical features of voice search technology, and there appears to be limited research undertaken to explore how consumers interact with smart devices and voice assistants (Hoffman & Novak, 2018; Jeng et al., 2016; Kowalczyk, 2018; Kuligowska & Lasek, 2005; Lopatovska et al., 2018).

2. Theoretical Review

2.1 Consumer adoption of voice search technology

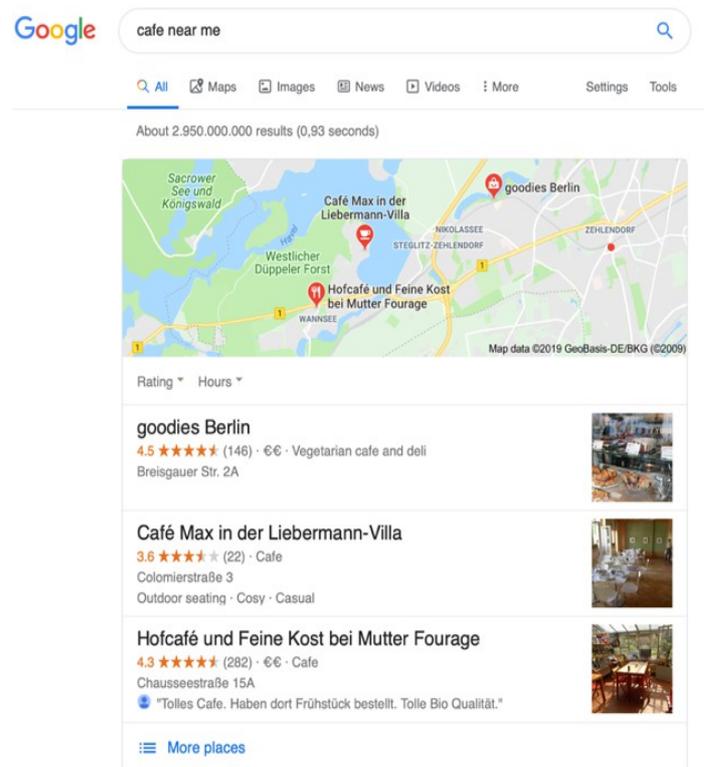
Kowalczyk (2018) found that functional capability and system quality are key factors influencing consumer adoption and perceived usefulness of smart technology. Searching via voice technology is generally perceived as more challenging than a typed inquiry due to the number of errors that may arise such as failed voice recognition. Not surprising, Jeng, Jiang and He (2016) found that voice search was perceived most useful during situations in which the user’s hands were unavailable, for example, when driving or cooking. This is possibly why Google Glasses and Google Watch do not have a keyboard anymore and can only be regulated via voice command (Alpar, Koczy and Metzen, 2015). Lopatovska et al. (2018) found that there are situations where people avoid using voice search, specifically when in public places as it is not yet perceived as a socially acceptable behaviour. Consumer adoption of smart assistants is also impeded because they often record conversations and therefore may pose privacy threats (Lopatovska et al., 2018), and because they store data and connect with the cloud making them a potential target of criminals and hackers (Lei et al., 2017; Wirtz et

al., 2018).

2.2 Characteristics and application of voice search technology

A major capability of artificial intelligence (AI) is natural language processing which refers to the ability to understand, analyse and process human language without the interference of a human being (Wagener, 2019). Coding language was long the communication base between humans and machines. However, natural language is the standard now being pursued to make information exchange more free flowing (Wagener, 2019). For many years, Google trained users to search the web in a certain way: typing a few keywords into the Google search engine via the keyboard on a PC, notebook, tablet or smartphone. Subsequently, a whole new industry was brought to life: Search Engine Optimisation and online advertising. Due to ever-developing smart technology, it is now 'voice search' that plays a more important role. But a voice command differs essentially from a typed query as it involves complete sentences instead of just a few keywords. Butler (2019) explains that it is important that firms rethink natural language and optimise for what can be understood as conversational search by providing answers to the questions 'what', 'who', 'where', 'when', 'why' and 'how'. Furthermore, firms should keep in mind when optimising for voice search that smart assistants not only source information from Amazon and Google, but also use directories like Yelp and Foursquare (Uberall, 2019). Hence, it is important that firms have their company information such as address, opening hours, and even the business name consistent across all their different platforms. Up-to-date contact information is also important as a key type of voice search is 'near me search'.

Figure 1. Screenshot of results using 'Hey Google' voice search to find 'a cafe near me'



Using 'Hey Google' voice search to find cafes near me the results page in Figure 1 shows the list of cafes in the researcher's immediate environment based on their GPS data. The top three

search results are presented in a box which Google calls the local 3-Pack (shown in Figure 1). Chatmeter (2018a) found that 76% of mobile searches using 'Hey Google' to find a product or service nearby resulted in same-day in-store visit. The Voice Search Readiness Report (2019, p. 25) explains that when business information is missing or wrong, "it is sales you are losing at the end of the day" as "users conducting voice search queries for local business information have almost certainly decided to visit the store with purchasing intent".

Interestingly, 'near me search' is usually non-branded as it is not about finding the nearest Starbucks but rather about finding the most convenient and nearest option to get a coffee. The phenomenon of unbranded search therefore provides another insight into how searching via voice is different from typing a query (Chatmeter, 2018b).

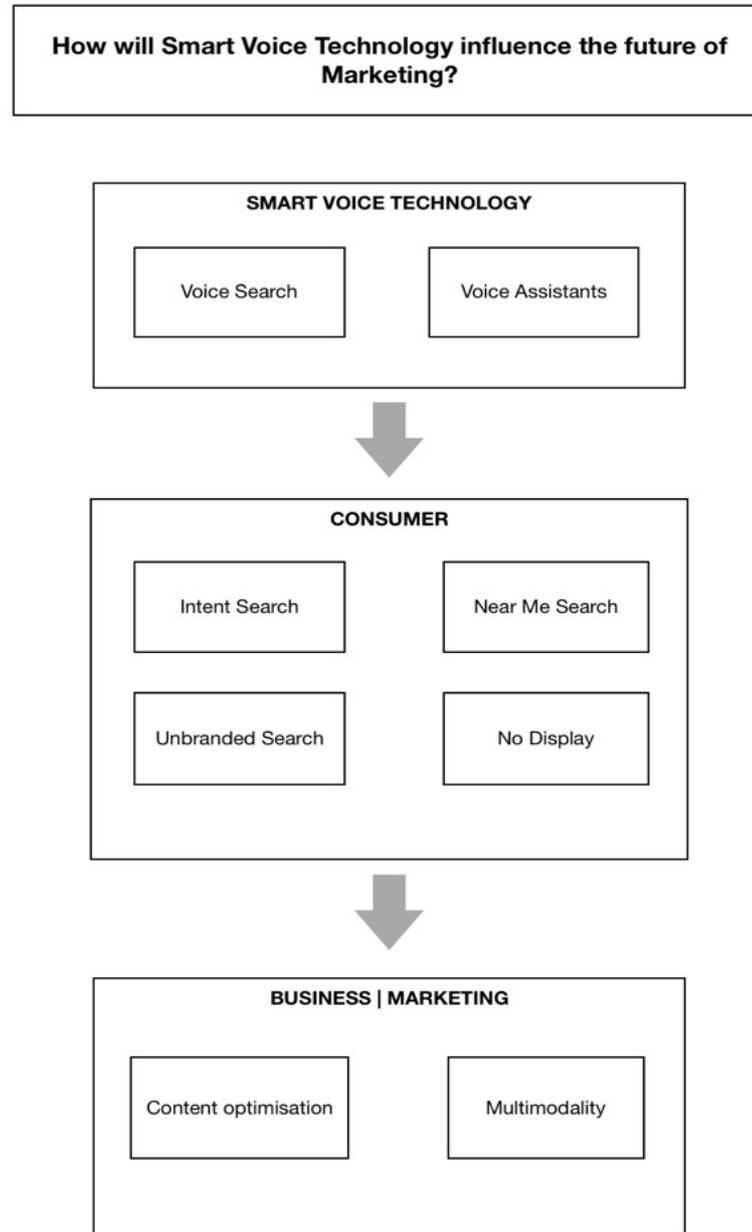
Another key concept is 'intent search' which refers to the consumer's intention for using voice search technology (Yext, 2019b). Google classifies online search intentions into three types: 1. '*Do*', meaning transactional or commercial consumer drivers such as "pizza near me" or "deals on outdoor Bluetooth speakers", 2. '*Know*', meaning informational or investigational consumer drivers such as "how tall is Tom Cruise" or "what's the capital of Croatia" and, 3. '*Go*', meaning navigational consumer drivers which means a search that is branded and paired with keywords such as "NIKE Berlin" and "Amazon purchase FAQs" (Yext, 2019b). Finally, it is possible for the consumer to use voice technology like Siri or Alexa without even looking at the display, a challenge in particular for product-driven businesses that rely on show casing their offerings. This paper proposes that reflecting on how to combine visual and auditory aspects in voice search technology is important for business. Forrester (2017) explains that this is where Amazon is leading with its Echo Look, Spot and Show products which are all smart assistants with a screen.

3. Conceptual Framework

The literature base is fragmented and consists mainly of practitioner press speculating about specific features of voice search technology such as key sentence search and the implications for firms, in this instance, local SEO. The Conceptual Framework in Figure 2 synthesizes current research to present key characteristics of consumer voice search behaviour and the implications for marketing practice. Figure 2 shows that two of the most common ways of using smart voice technology are through voice search such as using 'Hey Google' application to search the web and smart assistants like Amazon's virtual assistant. Figure 2 proposes that four factors are important when thinking about how smart technology changes online consumer search behaviour: 'intent search', 'near me search', 'unbranded search' and 'no display'. The conceptual framework proposes that when the consumer uses voice search technology they are prompted by 'do', a transactional or commercial intent, 'know', an informational or investigational intent, 'go', a navigational intent and possibly other, not yet identified, search intentions. Two unique characteristics of voice search behaviour relate to the consumer's tendency to use 'near me search' that is searching for something that is in the geographic proximity of the user, and unbranded search. Additionally, many users increasingly do not use their technological displays anymore, but listen only to the verbal answer provided by their smart assistant. Key implications of consumer use of voice search for business and marketing practice are next considered. Consumer use of 'near me search' which targets local businesses means it is important that contact information and opening hours are up-to-date on all directories like Yelp, Foursquare and Google My Business, and that firms invest in local SEO to be ranked high on search engine's results. This is why content optimisation is a key factor within the conceptual framework when it comes to the business and marketing side of the discourse. Keeping in mind that queries are often

unbranded is also challenging businesses, specifically researching what words and sentences consumers use to search for them and how to optimise the relevant content for this type of search behaviour. The concept of smart assistant multimodality has been identified as important, specifically with respect to how to visually and aurally present content.

Figure 2. Conceptual Framework



4. Research Objectives

RO1: To explore consumer intentions for using voice search technology.

RO2: To understand consumer search behaviour when using voice technology.

RO3: To investigate the potential of advertising in smart voice channels.

RO4: To make recommendations as to how firms can optimise for online voice search.

5. Conclusion and Recommendations

Challenges and opportunities arise, for both consumers and firms, with smart technology developments. Future research is recommended to focus on consumer search behaviour when using voice technology. Over the past decade consumers embraced the notion of having unlimited purchase options due to the dissemination of information over the web. The Conceptual Framework shows that in some instances consumers using voice search technology employ near me search and therefore the range of purchase options available is limited by geographic proximity. Future research therefore should explore how search behaviour and firm offerings change when consumers only want to know about a handful of options. The potential of advertising in smart voice channels is also an important research topic which as of yet appears to have received limited attention. Future research exploring how firms can optimise for voice technology and how to monetarise advertising activities via voice technology is important. Smart voice has the potential to have an impact on how we communicate in the future, how businesses and consumers interact, and how marketing is executed.

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Students' career decision-making self-efficacy: Lessons for recruitment marketing in different cultures

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Abstract:

Little is known about recruiting across cultures. Understanding students' career-decision making motives helps recruiters to align marketing activities with expectations of their future employees. Career-decision-making self-efficacy of students Austria and Ukraine is analysed with EI and academic performance as variables. Students from an individualistic, low power distance, low uncertainty avoidance culture rank higher in planning their career than students from a collectivistic, high-power distance, high uncertainty avoidance culture. EI has positive effects on CDSE with larger effects in Austria. Academic performance has positive effects on CDSE in Ukraine. Implications for recruitment marketing are discussed.

Keywords: *cross-cultural marketing, recruitment marketing, career decision-making self-efficacy*

1 Introduction

Even in these turbulent times, companies should think of 'a world after the crisis'. And in this world, global talent recruiting will be still important and relevant. However, as stated by Ma and Allan (Ma & Allen, 2009) little is known about recruiting across cultures, and most existing studies have been conducted in U.S. A better understanding of the students' motivation and drivers in their career-decision making process can help company recruiters to align their employer marketing activities with the expectations of their future employees. Hence for employers, sending appropriate signals via employer branding reduces potential employees' information costs and make them more likely to accept an employer's offer (Wilden, Gudergan, & Lings, 2010). In this contribution, career-decision-making self-efficacy (CDSE) of business students in two countries is compared, with the variables of 'culture', 'emotional intelligence', and 'academic performance' analysed. Business students in Ukraine and Austria were the subjects of the analysis. Cultural background along Hofstede's dimensional model (Hofstede, 2011), trait emotional intelligence (EI) (Petrides, Pita, & Kokkinaki, 2007) and self-reported academic performance were used to explain variation in (CDSE) and its dimensions. Whereas CDSE has been used as an instrument to investigate students' capabilities and assessment to plan and organize their future career, cross-cultural comparisons are rare. This contribution combines student career decision-making self-efficacy in a cross-cultural context with lessons derived for recruitment marketing and employer branding.

2 Recruitment marketing and employer branding

Recruitment marketing consists of all the marketing tools used to attract the right profiles from within a pool of applicants (Backhaus & Tikoo, 2004). The relationship of to-be-employees and employers is characterized by information asymmetry (Michael, 1974). Knowledge about the variables that determine students' career planning capabilities allows specifying customer-oriented arguments for recruitment marketing and employer branding. Personal as well as cultural factors may have an influence on students' capabilities to set career goals, plan first steps into a professional career, solve career finding related problems, and develop personal interests and career-paths in accordance with their values and lifestyle. Employers who have an understanding of the instrumental (functional) and symbolic attributes that make them attractive to future employees do have a significant recruitment advantage (Lievens & Highhouse, 2003).

3 Career Decision-Making Self-Efficacy

Career decision-making is a complex process that involves environmental as well as individual characteristics (Gati, Landman, Davidovitch, Asulin-Peretz, & Gadassi, 2010). Many factors play a role in an individual's career decision making process and expectations (Li, Hazler, & Trusty, 2017). Social cognitive career theory (Lent, Brown, & Hackett, 2002) accentuates cognitive and personal factors like personality, self-efficacy, outcome expectations and goals associated with academic performance. One of the most influential notions related to self-efficacy and career development is the concept of CDSE (Betz & Luzzo, 1996). CDSE is defined as 'an individual's degree of belief that he or she can successfully complete tasks necessary to making career decisions' (Mau, 2000, p. 368-369). It refers to several competencies in behavioural domains, such as goal setting and planning, career-related problem solving, or accurate self-appraisal. Goal setting refers to how one is able to set priorities in order to manage successfully her/his professional advancement. Planning denotes the possibility to establish plans for the future and to identify career paths. Problem solving states the ability to solve career choice problems and reach a socially acceptable and personally satisfying solution. Self-appraisal labels the extent to which a person can accurately assess her/his career-relevant abilities, values, and interests (Betz & Luzzo, 1996).

4 Empirical context: Ukraine and Austria

In the current study, two contrasting cultures are compared in assessing CDSE of business students, namely Austria and Ukraine. Table 1 depicts cultural dimensions of both countries.

Table 1: Cultural differences Austria – Ukraine. (Hofstede, Hofstede, & Minkov, 2010)

	Austria	Ukraine
Power Distance	11	92
Individualism	55	25
Masculinity	79	27
Uncertainty avoidance	70	95

Ukraine as a post-Soviet culture is characterized by a high level of **collectivism** and the absence of (political) self-organization (Blyznyuk & Lepeyko, 2016). In collectivist cultures self-efficacy is linked to congruence with parents (Howard, Ferrari, Nota, Solberg, & Soresi, 2009). Austria, in contrast, has a moderately high score in individualism. The level of **power distance** is high in Ukraine. Power distance reflects the extent of uneven power distribution in social structures (family, organizations, institutions, or society as a whole) and tolerance to inequality. Ukrainian culture has a higher level of internal inequality and more hierarchical pyramid structures. (Wackowski & Blyznyuk, 2017). Austria's score on the power distance dimension is one of the lowest overall (Hofstede et al., 2010), i.e. unequal power distribution is less tolerated. With respect to education, Austrian students do not feel that criticism of their professors should be avoided or even is harmful to them (Apfelthaler et al., 2007) and students do not perceive high hierarchical distances between them and their teachers. The cultural dimension of **masculinity vs. femininity** refers to methods of motivating people to perform work to achieve their goals. Cultures with a high level of masculinity (Austria) prefer active behavior with a dominance of traditional male values such as success, money, wealth, ambition, career, competition (Tompos, 2015). Higher levels of femininity (Ukraine) rather refers to passive target behavior with aspects of harmony and inclination to compromise, quality of life and care for others. **Uncertainty avoidance** reflects the degree to which members of a society cope with anxiety by minimizing the risk of making wrong decisions. Ukraine scores very high in uncertainty avoidance, thus Ukrainians feel very much threatened by ambiguous situations. Austria ranks lower, but still has a certain preference for avoiding uncertain situations, however, to a lesser extent. Career decisions are complex and comprise a certain level of uncertainty and ambiguity (Taber, 2013). Hence, the level of uncertainty avoidance might have an effect on the process of career decision making.

5 Hypotheses development

The first set of hypotheses relies on Hofstede's (2011) cultural dimensions framework. Ukrainian students live and learn under the condition of collectivism, high power distance, high uncertainty avoidance and a feminist culture. Mau (2000) found that for collective-oriented cultures students rely less on their individual abilities than on group efforts. Ukrainian students, thus, may have lower levels of self-efficacy concerning their individual career-planning capabilities. In contrast, Austrian students, as representatives of an individualistic country, may rely more on their capabilities to construct their future environment individually. Furthermore, the presence of a high power distance (like in Ukraine) might create the assumption that making plans for the future is highly subject to the activities of superiors (parents, political and business leaders), hence the importance of career planning is lower than in cultures with lower power distance (like Austria). Ukraine culture is described as more feminine than masculine, hence characteristics like planning, ambitious fighting, and competitive acting are less important. For Austria, as a country with a high masculinity score, the opposite might be true.

Actively managing and troubleshooting is also not a characteristic of a feminine culture like Ukraine, and, finally, at a high level of power distance goal directed behaviour (Sue-Chan & Ong, 2002). As Earley (1999) states, power distance correlates with the importance placed on high status group members' collective judgments. Hence, own problem-solving skills are not as important as in low power distance cultures, because one can rely on the fact that other people help with guidance and judgement. In contrast, masculine societies lend larger significance to tangible success.

Lastly, students' self-appraisal, i.e. a self-assessment of whether they are confident to make a career-decision, which is congruent to their values and life expectations, is compared for the Ukrainian and the Austrian sample. Research suggests that people in collectivistic cultures have interdependent self-appraisal and such in individualistic cultures have independent self-appraisal (Kolstad & Horpestad, 2009). Furthermore, in cultures that are more oriented towards masculinity, authorities and in-group members promote students to position themselves unambiguously in accord with the individual status assigned to them in the class-collective, thereby fostering adequate self-appraisals. Lastly, a high level of uncertainty avoidance might students be less confident in appraising their future career to be congruent with their values and life expectations. It is proposed that *Austrian students have a higher level of (a) career planning self-efficacy, (b) career organizing and managing, and (c) career-related self-appraisal than Ukrainian students (H1_{a-c}).*

The second hypothesis deals with the question whether EI has an effect on CDSE. Young et al. (1997) address the energizing and activating role of emotions in career exploration and decision-making activities in terms of how career possibilities are appraised by adolescents. Studies suggest that individuals with high EI have a stronger emotional awareness and a greater tendency to integrate thoughts and actions into their emotional experiences (Di Fabio, 2012). As such, EI may influence individuals' career planning and organizing processes. Emmerling and Cherniss (2003) demonstrated that individuals with higher EI identify their interests and values more clearly and communicate them more effectively during the career counselling process. With respect to culture, collectivistic orientation was significantly associated with greater emotional intelligence and better mental health outcomes (Bhullar, Schutte, & Malouff, 2012). Similarly, Gunkel et al. (2014) show that especially collectivism, uncertainty avoidance, and long-term orientation have a positive influence on the different dimensions of emotional intelligence. We propose that *trait EI has stronger effects on students' career decision making self-efficacy for Ukrainian than for Austrian students (H2).*

The relationship of academic performance and career decision making capabilities has been discussed in several studies. Kuncel et al. (2004) found that cognitive abilities are related to evaluations of creativity and potential. Also Lent et al. (1986) found a relationship of academic performance and self-efficacy with vocational interest and the range of perceived career option. In collectivist and high-power distance cultures, students are very much dependent on their teachers' judgement in their achievement beliefs. Students' self-efficacy is linked to congruence with parents or superiors (Howard et al., 2009). This is also supported by Mau (2000) stating that the presence of a high power distance leads to making plans for the future being highly subject to the activities of superiors (e.g. teachers). Better grades, as an expression of teachers' positive judgement, nurture career related self-efficacy and self-appraisal in these countries. H3 reads: *Academic performance has stronger effects on students' career decision making self-efficacy for Ukrainian than for Austrian students.*

6 Methodology

This study uses a questionnaire distributed to students at two universities, one in Austria, and one in Ukraine. Students from two Universities' undergraduate programmes specializing in

Marketing Management participated in the study. A total of 153 responses was collected, of which 99 were female, 54 were male, 86 were from Austria and 67 were from Ukraine.

Instruments: 14 of 25 items of the Career Decision Self-Efficacy Scale (CDSES) (Taylor & Betz, 1983) were used. An exploratory factor analysis (EFA) was computed to reveal underlying factors of the construct. A principal component analysis with Varimax rotation was conducted. One item ('talk with a person already employed in a field I am interested in') had weak loadings on all factors, so it was eliminated and EFA was recalculated. KMO test of sampling adequacy was sufficient (.876), as well as Bartlett's test of sphericity ($\chi^2=634,062$, $p=.000$). The remaining 13 items explained 53,43% of the variance with three factors which were - in accordance with the original intention of Betz and Luzzo (1996). They were labeled 'career-related planning and goal setting' ($\alpha=.707$), 'career-related problem solving' ($\alpha=.728$), and 'career-related self-appraisal' ($\alpha=.713$). Planning and goal selection and refers to the extent one can set priorities and establish plans in order to manage successfully her/his professional advancement. Problem solving refers to the extent one is able to figure out alternative coping strategies and solve career choice problems. Self-appraisal factor refers to the extent one accurately assesses her/his career-relevant abilities, values, and interests. EI was assessed by using the trait EI questionnaire (TEIQue) in its short version (30 items), a self-report measure of emotional self-efficacy (Petrides et al., 2007). A global trait EI score was computed ($\alpha=.855$). Academic performance was self-assessed by the students on a 1-100 scale. Gender and age were self-reported by the respondents.

Procedure: Paper and pencil questionnaires were used in class. For Austrian students, a German version of the measures was translated and retranslated. Ukrainian students received the original English version. Those students, however, have an excellent command of English as this is an enrolment criterion of the University where the study took place.

7 Analysis of data and results

First, bivariate correlations of all variables were calculated. Table 2 shows the correlations between the variables employed in this study.

Table 2: Bivariate correlations of all variables

Correlations	Age	Gender	Country	Global TEI	Acad. Perf.	CRPG	CRPS	CRSA	CDSE
Age		0.079	.294**	0.068	0.035	.177*	0.125	-.193**	0.094
Gender			0.100	0.134	0.132	.222**	0.047	-0.040	0.153
Country				0.134	-0.056	.214**	.305**	-0.118	.259**
Global TEI					.242**	.372**	.442**	.208**	.600**
Acad. Perf.						0.122	.180*	.155*	.259**
CRPG							0.000	0.000	.656**
CRPS								0.000	.578**
CRSA									.486**
CDSE									

CRPG = Career related planning and goal setting, CRPS = Career related problem solving,

CRSA = Career related self-appraisal, CDSE = Career decision-making self-efficacy

Pearson correlation coefficient

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

To test the first hypothesis (differences between Austrian and Ukrainian students with respect to their career-decision making self-efficacy), a multivariate analysis of variance (MANOVA) was conducted to reveal difference between the groups. Two groups (Austrian vs. Ukrainian students) were compared. Age and gender were added as covariates. Bartlett's test of sphericity was significant ($p=.002$), and Box's test of equality of covariance matrices was insignificant

($p=.066$), hence there were no violations of assumptions to conduct MANOVA. There was a statistically significant difference in CRPG, CRPS, and CRPA based on the students' country of studies, $F(3, 151) = 7.198$, $p = .000$; Wilk's $\Lambda = 0.875$, partial $\eta^2 = .125$. Because MANOVA was significant for the 'country of studies' variable, the univariate ANOVA results were examined. Figure 1 shows the graphical interpretation of the sub-factors for both countries. A main effect of country was found for career related planning and goal setting, $F(1, 156) = 5.55$, $p = .020$. Ukrainian students ($M = -.286$, $SD = 1.156$) reported significantly less career related planning and goal setting self-efficacy than did Austrians ($M = 1.490$, $SD = .892$). A main effect was also found for career related problem solving, $F(1, 156) = 14.086$, $p = .000$. Ukrainian students ($M = -.3415$, $SD = 1.075$) reported significantly less career related problem solving self-efficacy than did Austrians ($M = .238$, $SD = .86$). The main effect for career related self-appraisal was not significant ($F(1, 156) = .252$, $p = n.s$). Ukrainians and Austrian students did not differ significantly on the reported career related self-appraisal. (Figure 1). Confirming H1a and H1b, Austrian students showed higher levels of career related planning and goal setting and career-related problem solving self-efficacy. H1c (self-appraisal) could not be confirmed statistically significant.

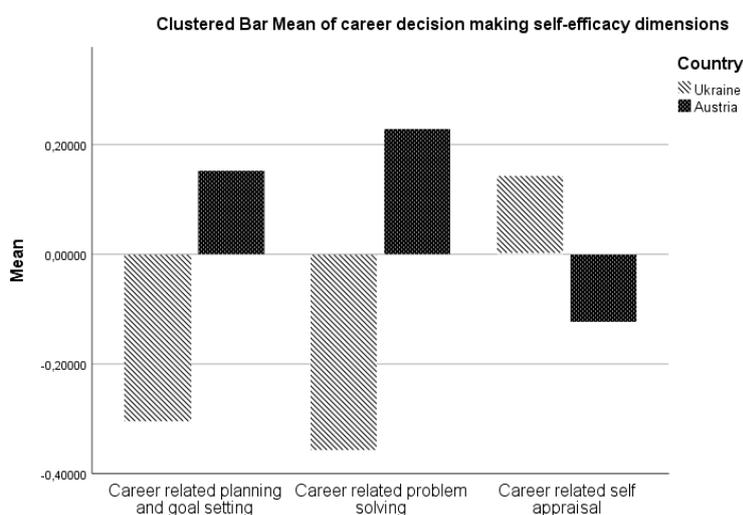


Figure 1: Mean differences of CDSE dimensions in Austria and Ukraine

The second and third hypotheses were related to the effect of EI and academic performance on career decision making self-efficacy. Multiple regression was used to test if EI and academic performance significantly predicted participants' CDSE. Age and gender were used as controls. The results of the regression indicated that, for Ukraine, EI explained 29.5% of the variance ($R^2 = .332$, $\beta = .369$, $p = .001$). For Austria, EI explained 65.5% of the variance ($R^2 = .455$, $\beta = .655$, $p < .001$). Only for Ukraine, a significant effect of academic performance ($\beta = .295$, $p = .009$) was found. To reveal the effect of EI and academic performance also on the level of the CDSE subscores (planning and goal setting, problem solving, self-appraisal), multiple regression was computed for each dimension individually. For career related planning and goal setting, the effect of EI was much larger in Austria ($\beta = .576$, $p = .000$) than in Ukraine ($\beta = .289$, $p = .027$). Similar, for career related problem solving, the effect size of EI was higher ($\beta = .624$, $p = .000$) than in Ukraine ($\beta = .362$, $p = .004$). Interestingly, the effect of EI on career related self-appraisal was insignificant for Ukraine ($\beta = .147$, $p = .283$), whilst it was significant for Austria ($\beta = .347$, $p = .004$). At the same time, for Ukraine, the effect of academic performance on career related self-appraisal became significant ($\beta = .262$, $p = .005$), whilst there was no significant relationship of academic performance and career related self-appraisal in Austria ($\beta = .072$, $p = .437$).

Table 3. Multiple regression analysis, CDSE total.

Country		Model	Unstandardized Coefficients		Standardized Coeff.	t	Sig.
			B	Std. Error	Beta		
Ukraine	1	(Constant)	-2.746	.837		-3.281	.002
		Age	-.007	.028	-.025	-.233	.817
		Gender	.290	.251	.124	1.153	.253
		Academic Performance	.030	.007	.437	4.053	.000
	2 ^b	(Constant)	-4.591	.953		-4.816	.000
		Age	-.007	.026	-.027	-.266	.791
		Gender	.197	.236	.085	.837	.405
		Academic Performance	.020	.007	.295	2.705	.009
		Trait EI	.519	.154	.369	3.366	.001
Austria	1	(Constant)	-.973	.708		-1.373	.172
		Age	.014	.028	.047	.507	.613
		Gender	.154	.199	.072	.775	.440
		Academic Performance	.009	.005	.163	1.735	.085
	2 ^c	(Constant)	-5.662	.739		-7.657	.000
		Age	.005	.021	.017	.247	.806
		Gender	.051	.151	.024	.336	.738
		Academic Performance	.004	.004	.071	.993	.323
		Trait EI	1.010	.110	.655	9.204	.000

a. Dependent Variable: Career decision making self-efficacy

b. $R^2 = .332$

c. $R^2 = .455$

8 Discussion

It has been demonstrated that the cultural variable has an effect on students' CDSE. Austrian students (representing an individualistic, masculine low-power distance and medium high uncertainty avoidance culture) and Ukrainian students (archetypal for collectivistic, feminine and high levels of power distance and high uncertainty avoidance) differ in their confidence to plan, manage and appraise their future professional career. Austrian students rank higher in their belief to plan their future career as well as to solve career related problems. Austrian students are used to take individual responsibility and to be held responsible for their decisions, which might be the reason for higher levels of self-efficacy in planning and managing their career development. These findings are in line with Oettingen's (1995) cross-cultural study with students on their general study-related self-efficacy. For Ukrainian students, representing members of a collectivist and high power-distance culture, self-efficacy is linked to their level of congruence with their parents and teachers. They might be less encouraged by the latter ones to develop self-sufficiency and independence (Akosah-Twumasi, Emeto, Lindsay, Tsey, & Malau-Aduli, 2018). Ukrainian students, in contrast, show higher levels of self-appraisal with respect to their future career. They have a higher trust in themselves to find the ideal job that fits into their preferred lifestyle. These findings were not statistically significant but, as the tendency is opposite to what was stated in the hypothesis, it should be mentioned as an interesting aspect. The relationship of trait EI and CDSE was investigated for both cultures. Trait EI was found to have a positive effect on CDSE in Austria as well as in Ukraine. These findings support Boyatzis et al.'s argument (Boyatzis, McKee, & Goleman, 2003), that emotionally intelligent people are adaptable, transparent, innovative, and conscientious about new challenges to perform well in their jobs. The findings are also in line with Liptak (2005), who is arguing that '*EI seems to be an excellent framework to use in helping college students find a job and succeed in the workplace*' (p. 171). The relationship of EI and CDSE was much stronger in Austria. For Ukrainian students, in contrast, a significant effect of academic performance and CDSE beliefs (mostly contributed through the career related self-appraisal dimension) suggest that those students believe they are capable of achieving only as much as their teachers' judgements suggest.

This is a typical pattern for collectivist and high-power distance societies. Evidently, better grades nurture career related self-efficacy and self-appraisal in these countries.

9 Lessons learned for recruitment marketing

The lessons learned for recruitment marketing will be discussed from two perspectives. First, based on signaling theory (assuming that the to-be-employee is the less informed party (Rynes, 1989)), the information demands of students from Ukraine and Austria are discussed through the lens of this study's findings.

Table 4: Implications for recruitment marketing based on signalling theory (Michael, 1974)

Study findings	Meaning	Lessons for recruitment marketing
Austrian students are more confident in being able to plan their career and manage problems than Ukrainian	Austrian students are willing to take challenges, vs. Ukrainian students are less self-assured to solve career-related problems and make long-term plans.	Austrian students Are open to concrete challenges and sophisticated employer branding. They are used to plan ahead and to solve career-related challenges. Ukrainian students feel less confident with challenging task and problems they have to solve. They might be more attracted by confirmative messages that help them to assess whether they fit into a firm's environment. Strong employer brands with concise messages might be easier appreciated by Ukrainians.
Ukrainian students rank higher in self-appraisal of their future career	Ukrainian students are better able to evaluate their own worth, significance, or status.	Emotionally loaded arguments, face-to-face contacts, social activities etc. do have a strong impact for Austrian students. However, to a lesser extent, this also holds for Ukrainians.
Emotional intelligence of Austrian students contributes more to CDSE than of Ukrainian students	Sociability, Emotionality, Self-control, and wellbeing are strong drivers for Austrian students, less for Ukrainian	In Austria, students are the right target group for recruitment marketing. In Ukraine, teachers (and other stakeholders in the university) should be targeted as their judgement and estimation is very important for the students. An employer brand should be known not only by the students, but even more by the teachers in Ukraine.
Academic performance has a strong effect on CDSE with Ukrainian students.	Owed to collectivist and high-power distance orientation, teachers' estimation of students' performance does play an important role.	

In a second step, a temporal perspective based on Ma's and Allen's (2009) value-based model of recruitment is used to derive implications for recruitment marketing. Table 3 shows some lessons.

Table 5: Implications for recruitment marketing based on the value-based model of recruitment (Ma & Allen, 2009)

Phase according to Ma and Allen (2009)	Lessons for recruitment marketing
Generate Applicants <ul style="list-style-type: none"> Choice of recruitment sources (formal, informal; active, passive) Recruitment materials (group, individual) 	Austrian students like to plan and solve problems. More formal, active communication, with tasks, challenges, quizzes, might be more welcome by Austrians. Recruitment materials should be dedicated to teachers and other superiors as well in Ukraine. Formal judgement of teachers is relevant. Materials can include emotional approaches in both countries, however, the emotional involvement is higher in Austria.
Maintain Applicant status <ul style="list-style-type: none"> Interview (structure) Administration (communication, time) 	In Austria, interview processes can include problems to solve, vs. in Ukraine this might be threatening due to a lower confidence in problem solving capabilities.
Influence job choice decisions <ul style="list-style-type: none"> Objective (extrinsic, intrinsic) Subjective 	The final job decision in Ukraine might involve teachers' judgements, vs. in Austria the applicants themselves play a dominant role. In Ukraine, as performance (judged by others) does play an important role in creating confidence in career-planning, objective criteria to underline decisions can play a stronger role.

10 Limitations and directions for future research

Of course, this study has limitations that need to be addressed. First, the countries that have been selected for this analysis (Austria and Ukraine) differ a lot in main dimensions of Hofstede's cultural model. The findings should be generalized with caution to other countries/cultures. Secondly, the sample sizes were relatively small; hence, a replication of the study with

larger samples would be much appreciated. Thirdly, only business students were asked to participate in the survey. Research suggests that students of business and non-business disciplines are different in their value sets, or in their risk-taking behavior (Harris, 1990; Sušanj, Jakopec, & Miljković Krečar, 2015). Hence, future research might focus on other disciplines than business in order to contribute to a broader picture. Lastly, the study only measures CDSE in a cross-sectional manner, and does not include a longitudinal perspective. It would be interesting to investigate the relationship of students' CDSE and their performance in their first employments after graduation.

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The Antecedents of the Value Co-Destruction – A Holistic Perspective

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Abstract:

There is a burgeoning field of value co-creation (VCC) research in the past decades. However, the complexity and heterogeneity of multi-actors tear the harmoniousness of VCC apart. Hence, value can be co-destroyed in a multi-actor involvement setting. Prior research on value co-destruction (VCD) focuses on the process and outcomes, with limited attention on the VCD antecedents. Our study sheds the lights on exploring the VCD antecedents in the B2C context. Further, instead of examining the VCD antecedents from blunt and simplistic view, We adopt a holistic view. It incorporates the lens of employee, company and customer to explore the antecedents. We used semi-structured interview to obtain VCD incident data. We propose a model of two constructs that are less participation and low engagement as antecedents and these constructs are formulated from the holistic – both dyadic and triadic perspective. Finally, this study contributes to the deeper understanding of VCD domain.

Keywords: *value co-destruction, holistic view, B2C context*

1. Introduction

There is abundant number of VCC research in the past decades (Lenka, Parida, and Wincent, 2017). VCC has been defined as a process that companies configurate resources with various actors and realize benefits for the business actors (Vargo, Maglio, and Akaka, 2008). However, in a multi-actor involvement setting, factors like conflicts of interests and communication friction tear the harmoniousness of VCC apart and increase the likelihood of co-destroying value. This phenomenon is called value co-destruction (VCD). Past research on VCD mainly focuses on the examination of its process (Makkonen & Olkkonen, 2017) and the consequences (Heidenreich, Wittkowski, Handrich, and Falk, 2015). There is a paucity of exploration of VCD antecedents. Few papers have investigated the co-destroy of value in B2B (Chowdhury, Gruber, and Zolkiewski, 2016) and B2C (Vafeas, Hughes and Hilton, 2016) context. However, these studies only focus on dyadic perspective, namely customer and company, without the examination of an interactive and holistic lens among employees, companies and customers.

In this paper we aim to explore the antecedents of VCD in the B2C context. We adopt a holistic perspective to investigate the antecedents. Through the exploratory study, we explored the interactive, complex, and dynamic relationship among company, employee and customers in B2C VCD context. Our study contributes to the understanding of antecedents of value co-destruction from a holistic perspective. We adopt a multi-actor perspective, including customers, employees and company to investigate the interconnected and dynamic triggers. Our results reveal that co-destruction of value can be caused by dyadic and triadic relations.

The paper starts with a review of VCD and its antecedents, followed by a description of research design, data collection and analysis. Findings and discussion are also provided. Finally, the theoretical contributions, managerial implications and limitations are presented.

2. Literature Review

2.1 Value co-destruction

Value co-creation is associated with the joint actions and behaviors to create value between company and customers (Etgar, 2008). In B2C context, VCC is vital both for companies and

customers, because co-creation of value can increase customer happiness and satisfaction (Hsieh, Chiu, Tang, and Lin, 2018), and provides competitiveness for company ongoing survival (Cossío-Silva, Revilla-Camacho, Vega-Vázquez, and Palacios-Florencio, 2016). However, recent research suggest that value can be co-destroyed due to the complexity of multi actor involvement.

Value co-destruction is defined as “an interactional process between service systems that results in a decline in at least one of the systems’ well-being.” (Plé & Chumpitaz Cáceres, 2010, p.431). This means that value can be co-destroyed by any combination of actors participated. Prior research regarding on VCD mainly focuses on the examination of process (Makkonen & Olkkonen, 2017) and consequence (Chowdhury et al., 2016; Sugathan, Ranjan, and Mulky, 2017). For example, a study from Heidenreich et al. (2015) show that compared to low level co-creation service, high level co-creation service in the failure case would generate a greater negative disconfirmation with the expected service outcome.

2.2 Antecedents of value co-destruction

Prior research on VCD is limited, and Chowdhury et al. (2016)’s study embarks on the importance of this issue and call for more research on this topic. Vafeas et al. (2016) publish an article that analyze the antecedents of VCD from the resource perspective in the B2B context. In addition, Järvi, Kähkönen, and Torvinen (2018) investigate the VCD antecedents based relational lens, including B2C interactions, B2B interactions, and public actor interactions. However, existing research on VCD antecedents is simplistic (Smith, 2013) and dyadic. This means that they only focusing on the exploration of relation between customer and organization (Vafeas et al., 2016), with little attention on employee level. Consequently, this study examines the VCD antecedents in B2C context from a holistic perspective, including employee, company and customers.

3. Methodology

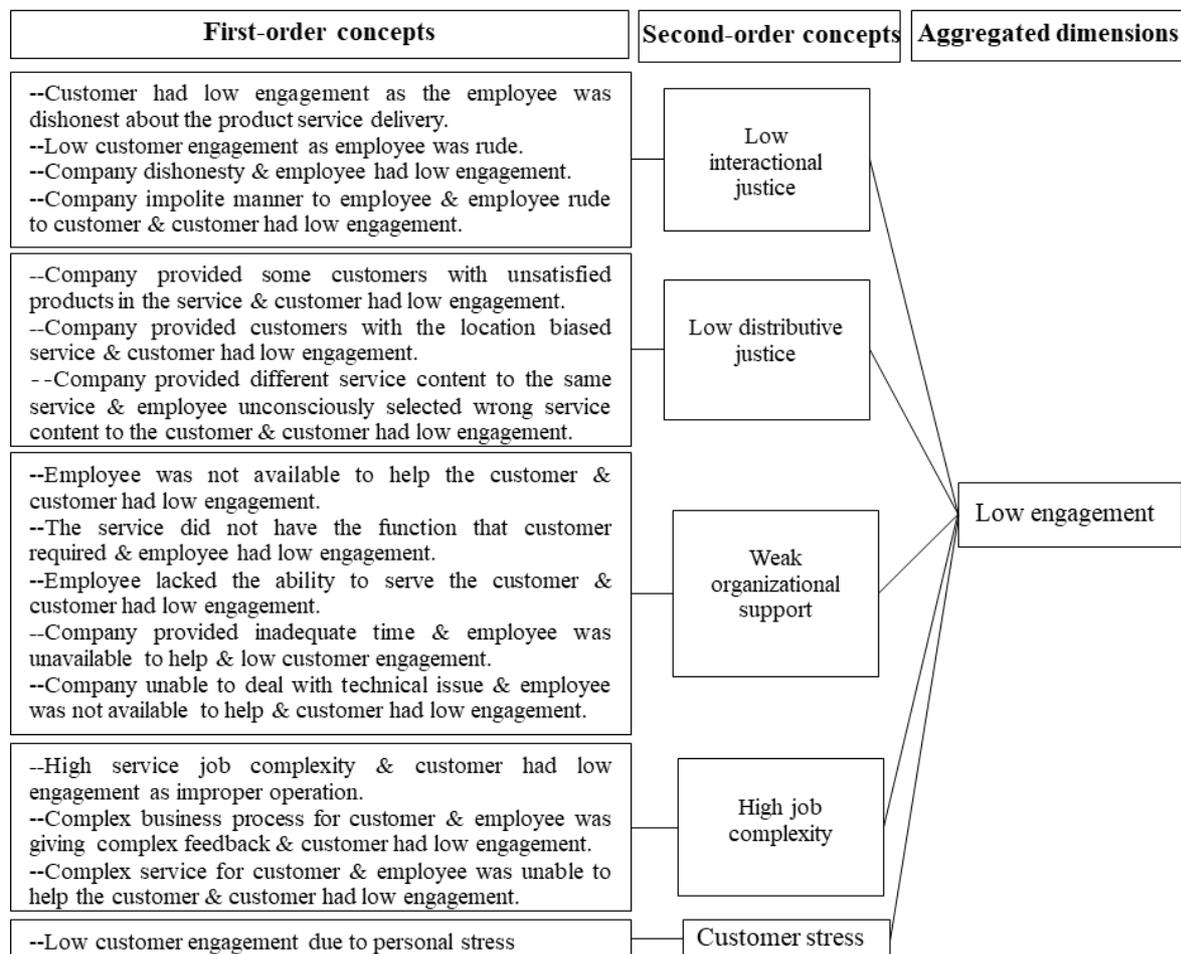
3.1 Data collection

Data was collected by conducting semi-structured interview. We adopt snowball sampling

technique as this is useful when the target population is difficult to locate (Rubin & Babble, 2006). Specifically, we interviewed a few participants who have VCD experiences and then, they brought other people who have this kind of experiences to come. There are 32 interviewees in the study, including customers, companies and employees. We suggest that president, vice president, and director of companies are identified as company level and other employees are deemed as employee perspectives. This is because employees can directly interact with customers while the president should not. Each interview lasts around 50 minutes.

3.2 Data analysis

Follow by Gioia, Corley, and Hamilton (2013), the transcripts are coded. We organize the data into first-order concepts, and then search of similarities and differences of first-order concepts in order to categories them into second-order concepts. Third, we need to ensure the emerging themes can represent the observed phenomena. Last, the aggregate dimensions can be generated. The coding process across the whole data can be seen in figure 1.



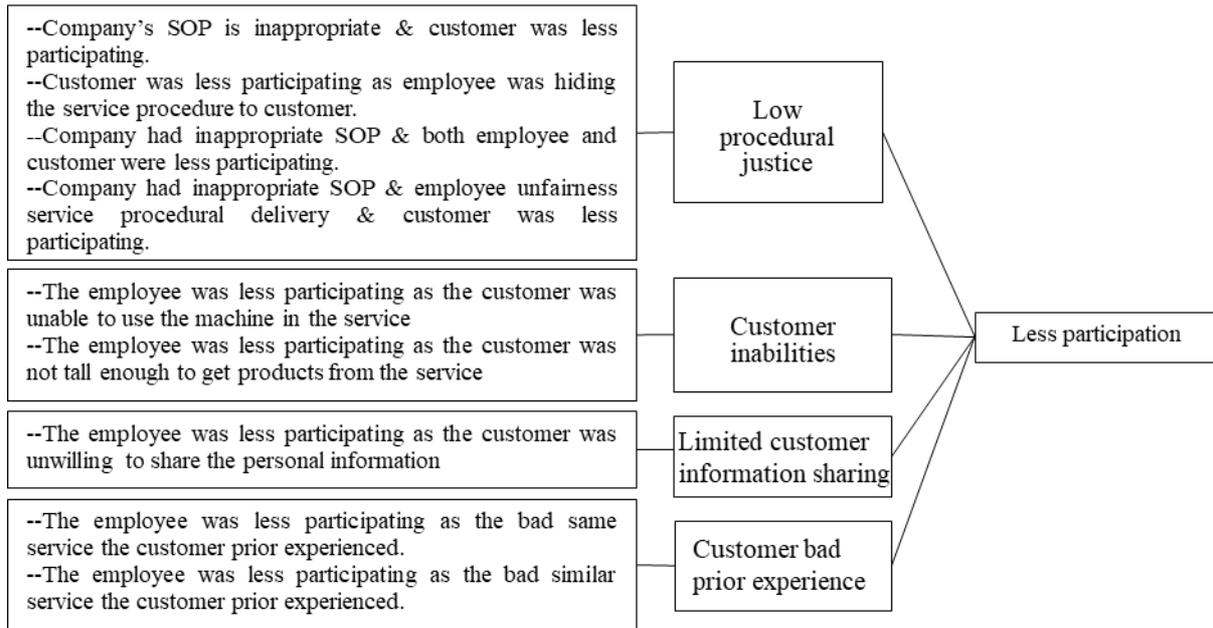


Figure 1: Data analysis framework

4. Findings and Discussion

The results show that there are two antecedents: *low engagement* and *less participation*. Participation implies a level of involvement alone whereas the engagement suggests a more empowered role (Lukensmeyer & Torres, 2006). The difference between these two constructs is that *Less participation* refers to actor who is not willing to join into the co-created service or who is not holding the stay intention in the service, whereas *low engagement* refers to low interactional tendency in the co-created service.

The results demonstrate that VCD can be provoked by three dyadic and one triadic relation. Figure 2 shows our framework which incorporates dyadic and triadic relationships among employees, firm and customers. The main antecedents are demonstrated in the figure as well. In addition, based on the second order factor and aggregated dimensions in figure 1, figure 3 shows the antecedents of VCD in four relationship contexts.

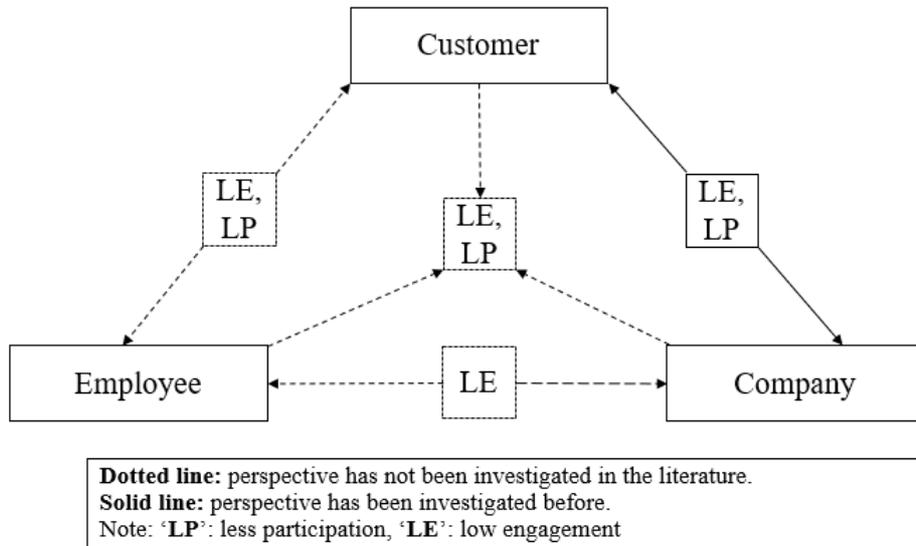


Figure 2: A holistic view of value co-destruction antecedents

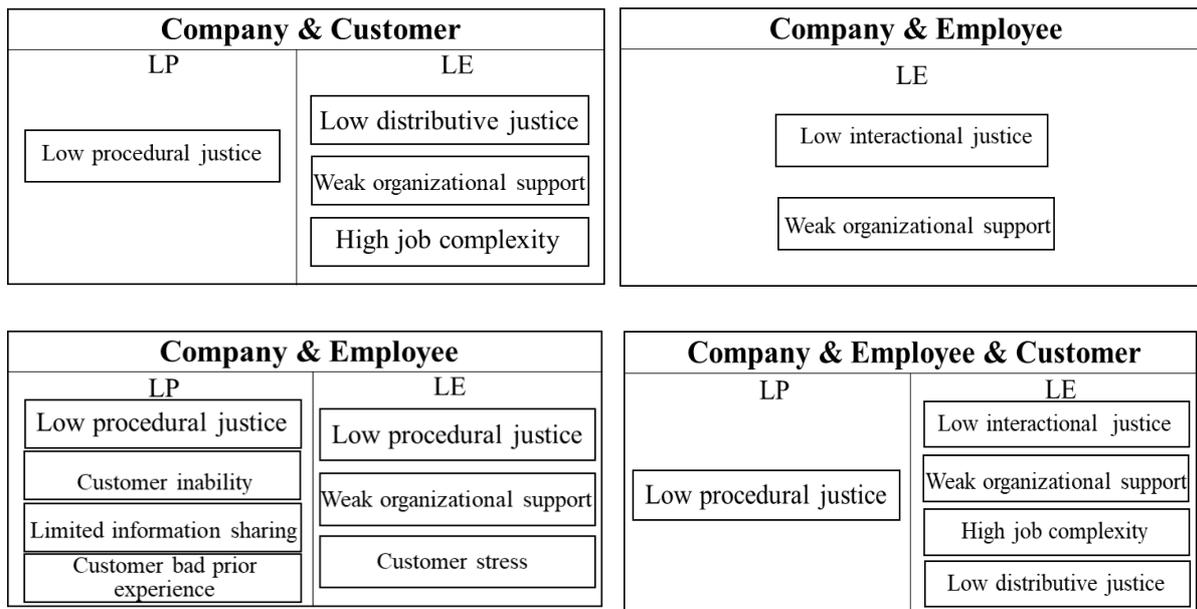


Figure 3: Antecedents of value co-destruction in a multi-actor setting

In figure 3, we show antecedents from the company and customer lens, namely VCD is triggered by Low engagement and Low participation. This means that companies need to have a good design of service and this can diminish the likelihood of value destruction. An example of Low engagement is customer's perceived low distributive justice during the service process and this leads to dissatisfaction of customers and value diminishing. This is reflected by the following case:

"It is the company's unfair treatment. Actually, I prepared a lot of things in terms of this activity, but once I saw that I was being treated unfairly, the negative emotions immediately generated, and I was not that engaged anymore."

In figure 3, we also demonstrate VCD antecedents from customer and employee lens. The results show that VCD can be caused by Low participation and Low engagement as well. This means that companies can invest more efforts in employee training to provide better service. An example of VCD caused low participation is insufficient information sharing between customer and employee, which is demonstrated in this case:

A bank vice president reflected that "As the customer told my colleague, he was not willing to share so much personal information to the STM (smart teller machine) ...the lobby manager directly brought this customer to the counter without any STM operation education."

We also provide VCD antecedents from company and employee relation. The result shows that VCD is triggered by Low engagement. This means that the top management team should design the service and procedure in a fair, supportive way. One of the examples is mentioned as *"As my boss (director) was cheating me, I did not want to serve the customer so nicely as I normally do."*

Finally, our study describes VCD antecedents from a triadic perspective, that is employee, customer and firm. The antecedents in this case is Low participation and Low engagement. The result show that customers feel low level of procedural justice due to the company and employee's behaviors. For example, one of our cases talked about general manager's opinions of dyadic VCD.

"Our standard operating procedures, at the moment, are lacking the step for telling the customer that they cannot eat the blueberry directly in the orchard before customer finished the payment. Usually, when the customer eating the blueberry in the orchard, our staff would critiqued them and not willing to serve them in the service and then the customer is not willing to participate in the service and he/she will process his payment immediately."

Besides, our finding suggests that a triadic VCD can be also caused by low engagement. Customers can have a low perception of interactive and distributive justice, as well as the high job complexity and weak firm support. An example comes from tea shop manager that the service process is designed in a complex way and employees are unavailable to serve the customers, thus customers have low engagement intention:

"I believe that we should bring clear instructions to customers about different types of tea leaves (service is complicated to the customer). The employee was unable to help due to too many customers, and then customers were not that engaging anymore which I can saw from their faces"

In summary, the three dyadic relations and one triadic relation implies that value can be co-destroyed in different conditions. On the one hand, companies need to establish a well-developed management and accountability system and make greater efforts in employee training to strengthen the quality provided for customers. On the other hand, companies should be instilled with honesty and fairness to provide more value and satisfaction for customers.

5. Conclusion

5.1 Theoretical Contributions

First, this research contributes the understanding of the antecedents of VCD from a holistic view by incorporating the lens of employee, company and customer. Our findings show that value co-destruction can be caused by the dyadic and the triadic relations. Specifically, our result demonstrates that VCD can also be provoked by employee and company, without the participation of customer end. In addition, a triadic value destruction scenario is also suggested by our research, which means that the reasons of service failure can be attributed to three parties.

Second, this study focuses on the exploration of antecedents of value co-destruction in the B2C context. Previous research focuses more on the B2B context (Chowdhury et al., 2016; Vafeas et al., 2016). Hence, this paper extends previous research by showing the triggers of value co-destroy among customers and service providers.

5.2 Managerial Implications

Our results show that value co-destruction is frequently involved with customer end. Hence, it is significant that companies need to have a deep understanding of the client world. Customer may be personally distressed, lack of professional knowledge, or have high expectations. The product or service should be designed more customer oriented and employees are advised to take care of personal needs. In addition, the research findings suggest that some value is destroyed by employees and companies themselves, for example, the dishonest behaviors. This means that companies need to establish accountable system and make greater efforts in training to strengthen the quality. In addition, companies should be instilled with honesty and fairness to provide more value and satisfaction for customers.

6. Limitations and Future Study

First, given that this paper focuses on the development of a holistic framework, future study can examine the individual dyadic and triadic context in our model. This can facilitate the understanding of value co-destruction in a deeper way. Second, this study adopts qualitative method, with the aim to provide a deep insights of value co-destruction antecedents. It is suggested that future study can use quantitative approach to test the research framework to enhance the generalizability.

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Impact of Age on the Willingness to Disclose Personal Data in E-Shopping

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Abstract:

E-shopping is an increasingly important way of purchasing among all age groups. However, buying online requires disclosing certain personal data which might be sensitive, especially – to older people. This is linked with their lower confidence in online technologies resulting in some degree of cyber fear. Indirectly, it makes older people rely on legal regulations that are passed to protect privacy online. Both, cyber fear and confidence with regulations are dependent on age, but have opposite impacts on the willingness to disclose personal data online. This makes it difficult to assess how age impacts the willingness to disclose personal data. The study approaches this issue from the standpoint of the social exchange theory. The model includes factors of trust and distrust (paranoia), and two types of social exchange.

Keywords: *age, willingness to disclose data, social exchange theory*

1. Introduction

E-shopping inevitably requires to disclose some personal data. Part of it is absolutely necessary in order to perform transactions, some other part may be omitted because it is needed only if a person prefers to register on a site to obtain extra benefits (faster interactions for the next purchase, a more convenient access, personalized offers, etc. (Hong, Chan, and Thong, 2019). However, the disclosure of personal data includes some elements of uncertainty that is approached differently, depending on individual propensity to trust or distrust in everything that is happening around (Barto and Guzman, 2018; Urbonavicius, 2020). The level of uncertainty may seem higher if a person feels not well regarding the internet technologies and processes, i.e. experiences the so called cyber fear. This may be partially offset by trusting formal privacy regulations or acquiring additional confidence as a result of social interactions with other people who experience similar feelings (Zimaitis, Degutis, and Urbonavicius, 2020).

There is an ongoing discussion on how personal interactions with information technologies may be linked with age. In the context of online activities, age reflects not only a simple demographic characteristic, but also it integrates a variety of personal experiences and contextual influences that, at different time periods, have been differently present for the population (Finch, 1986). Numerous studies have analyzed these issues linking them with the age groups or generations, diverse considerations regarding innovativeness, technology acceptance and many more aspects/factors (Heart & Kalderon, 2013; Rojas-Méndez, Parasuraman, and Papadopoulos, 2017). The impact of age is highly relevant in online shopping context, since the importance of online shopping is growing worldwide, and the proportion of older people is very significant in many societies (Hargittai, Piper, and Morris, 2019).

This study concentrates on filling in the research gap regarding the impact of age on the willingness to disclose personal data online in online shopping. The study deployed a theoretical basis of the social exchange theory (SET) that links trust factors with two types of social exchange: a reciprocal exchange and a negotiated exchange.

A reciprocal exchange occurs on the basis of mutual trust of the exchange participants, with little or no regulations from the outside sources. For instance, this type of exchange is happening in social networks, where the participants disclose personal data, opinions or experiences. The involvement in this type of interactions gradually increases trust in social exchanges, therefore it stimulates trust in the future. This might be the reason why a reciprocal exchange is positively linked not only with trust, but also with distrust: high levels of distrust or paranoia trigger a search for social interactions with similar peers in order to obtain a stronger confidence in personal beliefs and activities (Zimaitis et al., 2020).

The act of online purchasing where a person interacts with a company within a formally regulated framework may serve as an example of a negotiated social exchange. The exchange partners are not necessarily on equal position; a buyer, simply, has to provide certain personal data in order to make the transaction happen. On the other hand, this inequality might be partly compensated by the external legal regulations or formal procedures of companies that participate in online activities. If the consumers are aware of the external regulatory systems that supervise and control how the transaction that includes personal data disclosure is implemented, they might be more willing disclose their data in the negotiated exchange situations.

This study focuses on most common personal data disclosure situations present in marketing and e-commerce that represent the negotiated exchanges (King, 2018). The aim of this study is to analyse how the SET based model of the willingness to disclose personal data in online buying is influenced by the factor of age. The impact of age is assessed as a direct effect on the relevant

factors as well as the total effect on the willingness to disclose data. In addition to age, the model includes the key trait type antecedents: trust (propensity to trust) and distrust (paranoia). Cyber fear and the perceived regulatory efficiency are the two mediators in the context of e-commerce. Cyber fear integrates general distrust in technologies and its linkage with human age; the perceived regulatory efficiency reflects the perceptions towards the legal regulations of privacy online, including GDPR (Urbonavicius, Laurutyte, Zimaitis, and Skare, 2020). The variable of a reciprocal exchange (social media use integration) is included into the model because in the context of SET one form of a social exchange significantly impacts the other form of exchange (Molm, Whitham, and Melamed, 2012). As a result, the findings disclose novel insights into the willingness to disclose personal data online with regard to the buyers' age.

2. Literature Analysis

A theoretical background for this study is the social exchange theory (SET) that stems from the conceptual writings of George C. Homans (1961), Phillip Blau (1964) and Richard Emerson (1976). In the process of its evolution, this theory was used in business-to-business marketing (Lambe, Wittmann, and Spekman, 2001), service industry (Sierra & McQuitty, 2005), privacy-related behaviours and attitudes of consumers (Metzger, 2004; King, 2018). It also seems very applicable for modelling the willingness to disclose personal data online, since it refers to the two types of social behaviours widely found in online activities.

From its early stages, the SET developers made a distinction between *reciprocal* and *negotiated* exchange types (Levi-Strauss, 1969). A reciprocal exchange is based on a belief that other participants of the exchange will participate in the relations on similar terms and will respond by providing similar resources. Typically, these relations are continuous - the reciprocity and exchange relations are developed in the process of sequential exchange transactions (Molm, Takahashi, and Peterson, 2000). The resources exchanged may include various types of information, therefore a typical example of this type of exchange is the involvement in social media activities (Cheng et al, 2011). Here, no strict assurance or the regulations are present; the key driver of this exchange is the mutual trust among the participants (King, 2018).

In a negotiated exchange, the terms of an exchange are known to both the partners in advance; the majority of social exchanges that include economic activities are negotiated (Molm et al., 2000). Therefore personal information disclosure in e-commerce also belongs to a negotiated exchange: the information is collected by marketers in exchange for the offered benefits (access, convenience or monetary compensation in the form of discounts or bonuses) (Malgieri & Custers, 2018). The process of exchange is rather formalized by some form of permission to use personal data and is typically backed by the legal assurance systems. The perception regarding this assurance largely predetermines the willingness to disclose personal data (Hong et al., 2019).

Both types of the exchange are dependent on trust or distrust, and a disclosure of personal information largely depends on personal disposition regarding trust (Bansal, Zahedi, and Gefen, 2016). However, in negotiated exchange with a company, the buyer is often on unequal (weaker) terms, since providing at least some information is mandatory in order to have a planned transaction. This weakness is partly compensated by the buyer's reliance on formal regulations and his/her experience gained from other type of exchange (for instance, after being involved in social media activities). Therefore, the perceptions about the efficiency of regulations and the involvement in social media activities are two strong antecedents that positively impact the willingness to disclose personal data when buying online.

Additionally, online activities are dependent on one's familiarity with and feelings regarding the internet technologies. These are often analysed in the framework of technology acceptance within TAM or UTAUT models and their modifications (Im, Hong, and Kang 2011; Zhang & Lee, 2014; Agrebi & Jallais, 2015). Even though the negative side of it (technology avoidance, fear) has been analysed less frequently, in the context of online activities it is highly relevant (Saad et al., 2018; Khasawneh, 2018; Dinello, 2005).

The theoretical backgrounds mentioned above often include the dimension of human age as an independent or moderating factor that is linked with social interactions (Sherchan et al., 2013; Grabner-Krauter, 2009), trust and distrust (Szymczak et al., 2016) as well as the specifics of online activities (Aghasian et al., 2017). Therefore, a deeper analysis of the impact of age on the disclosure of personal data in online shopping stands on a solid theoretical background.

The social exchange theory envisions the importance of trust in both, the reciprocal and negotiated exchange behaviours (Imhoff & Lamberty, 2018). However, propensity to trust is stronger and more directly linked with the reciprocal exchange behaviour (Molm et al., 2000). In the negotiated exchange relations, trust is "amended" by the measures of assurance that may be imposed by legal and normative authorities that define, supervise, impose sanctions for violations of the terms of agreements (Yamagishi & Yamagishi, 1994). Therefore, in total, trust impacts the negotiated exchange behaviour in online purchasing, at a minimum, in two ways: with the mediation of the reciprocal exchange interactions and with the mediation of the perceptions about the assurance systems (including GDPR). In total, it is expectable that trust positively impacts the willingness to disclose personal data:

H1: The total effects of trust on the willingness to disclose personal data are positive.

There is little evidence on how the same process is impacted by the opposite factor, i.e. – distrust. The rational form of distrust is mainly measured by the low levels of trust and does not require a separate assessment. However, many activities include the irrational forms of distrust, and one of them is paranoia (Zimaitis et al., 2020; Jack & Egan, 2017). However, the trust-based logics may be applied in its effects regarding the exchange as well: distrust (paranoia) is supposed to interact with a reciprocal exchange and with the perceptions about the assurance systems. In terms of the use of IT technology, paranoia has to generate technology avoidance or fear. Therefore, cyber fear is supposed to be an additional mediation between distrust (paranoia) and the negotiated exchange behaviour in online shopping. In total, it is expectable that paranoia impacts the willingness to disclose personal data negatively:

H2: The total effects of paranoia on the willingness to disclose personal data are negative.

The main factor of this analysis is the impact of the human age on the willingness to disclose personal data in online shopping. With numerous different ways of reasoning, the overall conclusion is that older people are less active online, less willing to accept novel technologies and are more concerned about their privacy (Berner et al., 2011; Adams et al., 2009; Roos, 2018). This allows to develop the hypothesis:

H3: The total effects of age on the willingness to disclose personal data are negative.

However, a deeper analysis is required to assess the interactions between the age and other factors considered in the context of this particular analysis.

The common understanding regarding the interactions of older people with novel technologies suggest a negative type of this relation (Adams et al., 2009; van Deursen et al., 2011) The attitude with technologies might obtain a form of fear, and in this case the hypothesis is:

H4: Age positively impacts cyber fear.

On the other hand, older people are found to be more conservative and are likely to trust formal rules and regulations more than younger people (Adams et al., 2009). This allows to predict the interaction between age and the perceived regulatory effectiveness:

H5: Age positively impacts the perceived regulatory effectiveness.

However, many types of age-linked effects are not clear, since they are based on the complexity of accumulated experiences, beliefs and attitudes developed throughout lifetime. Since it is not possible to segregate all the influencing factors, age itself may serve as a proxy for all of them together. This allows to state:

H6: Age negatively impacts the willingness to disclose personal data directly.

3. Sample and Measures

The data were collected on the basis of an online survey. All the variables were measured with the use of scales successfully deployed in former studies.

More specifically, trust was measured on a 4-items 'Propensity to Trust' scale (Frazier, Johnson, and Fainshmidt, 2013); paranoia was measured on a modified (shortened) scale of Fenigstein and Vanable (1992), that was used in other studies (Gumley et al., 2011; Urbonavicius & Zimaitis, 2018; Zimaitis, et al., 2020). The reciprocal social exchange behaviour was measured with the 10-items social media use integration scale, used by Jenkins-Guarnieri et al. (2013). The negotiated social exchange was assessed by measuring the willingness to disclose personal data in online shopping. The preamble of the question specified the situation of a potential disclosure of personal data (when purchasing products online); the variable was measured on a shortened scale developed by Gupta, Iyer and Weisskirch (2010), later used by Robinson (2017). Cyber fear was measured on a 5-items scale following the study of Mason, Stevenson, and Freedman (2014). The perceived regulatory effectiveness was evaluated with a 3-items scale adopted from Lwin, Wirtz, and Williams (2007) with an additional mention of GDPR in one of the items. All the items were assessed on a 1 to 7 point Likert scale.

The data was collected in Lithuania using online self-administered survey; the sample 445 included respondents. Out of all the respondents, 25.6% were male and 74.4 % female. They belonged to two age groups: 16-49 (59.8%); 50 and over (40.2%). Since age is the key consideration in this study, prior to further analysis, t-tests for all the latent variables were performed between the two age groups (Table 1).

	Mean (below 50)	Mean (50 and above)	Mean difference	t	Sig. (2-tailed)
Trust (T)	3.9521	4.1775	-0.22545	-2.056	0.040
Paranoia (P)	2.4151	2.4396	-0.02448	-0.209	0.835
Social Media Use Integration (SMUI)	3.8042	3.9025	-0.09827	-0.647	0.518
Cyber Fear (CF)	3.6108	4.0051	-0.39426	-3.549	0.000
Perceived Regulatory Effectiveness (PRE)	3.8512	4.3785	-0.52733	-4.808	0.000
Willingness to Disclose Data (WTD)	4.5615	4.2006	0.36090	2.614	0.009

Table 1. Mean differences between two age groups

Levene's test for equality of variances was significant in the case of WTD, where the equal variances were not assumed; in all other instances, the equal variances were assumed.

This test was performed in order to pre-check the dependence of the latent variables on age. It confirmed that the means of the variables, expected to be dependent on age, were significantly different between groups: cyber fear, the perceived regulatory effectiveness and the willingness to disclose personal data. This allowed to proceed towards further analysis and to test the hypotheses.

4. Data Analysis

The exploratory factor analysis (Promax rotation, Maximum Likelihood extraction) was the first step towards the subsequent confirmatory factor analysis. Kaiser-Meyer-Olkin Measure of Sampling was adequate (0.765), Bartlett's Test of Sphericity showed approx Chi-Square of 3930.895 with $df=231$, $p=0.000$. The fit was appropriate: Chi-Square=310.452, $df=114$, $p=0.000$. The extracted 6 factors explained 579.68% of the variation with the cumulative initial Eigenvalues of 69.06%. The confirmatory factor analysis showed an acceptable fit of the model (CMIN/DF=1.320; $p=0.002$ TLI=0.980; CFI=0.984; RMSEA=0.027 (Byrne, 2010). This was achieved after reducing the items that measure the social media use integration to 6 items, paranoia to 3 items, cyber fear to 4 items and the willingness to disclose personal data to 5 items. Reliability and validity of the obtained scales were assessed by measuring the composite reliability (above 0.70, Bagozzi & Yi, 2012); according to Fornell-Larcker criteria (Fornell & Larcker, 1981), all the standardized factor loadings were above 0.50; the average variance extracted exceeded 0.50; the squared AVE values for each construct were greater than the correlation values of that construct. All these criteria were met (Table 2).

	Cronbach's Alpha	CR	AVE	CF	PRE	SMUI	WTD	P	T
Cyber Fear (CF)	0.789	0.792	0.562	0.750					
Perceived Regulatory Effectiveness (PRE)	0.795	0.796	0.565	0.024	0.752				
Social Media Use Integration (SMUI)	0.850	0.837	0.568	0.009	0.121	0.753			
Willingness to Disclose Data (WTD)	0.848	0.845	0.521	-0.139	0.071	0.179	0.722		
Paranoia (P)	0.769	0.770	0.527	0.192	0.160	0.285	0.080	0.726	
Trust (T)	0.864	0.859	0.603	0.024	0.184	-0.004	0.006	-0.280	0.777

Table 2. Validity and Reliability of the Constructs (CR – composite reliability, AVE – average variance extracted)

A common latent bias test came back positive (the difference in chi-square=54.8, the difference in $df=22$, $p=0.000$). Therefore, the variables were imputed including the presence of the common latent factor. The latent bias corrected model had an appropriate fit: CMIN/DF=1.164; $p=0.073$ TLI=0.990; CFI=0.993; RMSEA=0.020.

The structural model showed appropriate fit parameters: CMIN/DF=1.802; $p=0.082$; TLI=0.952; CFI=0.984; RMSEA=0.043. The model showed a set of the expected significant relations among the variables (Figure 1).

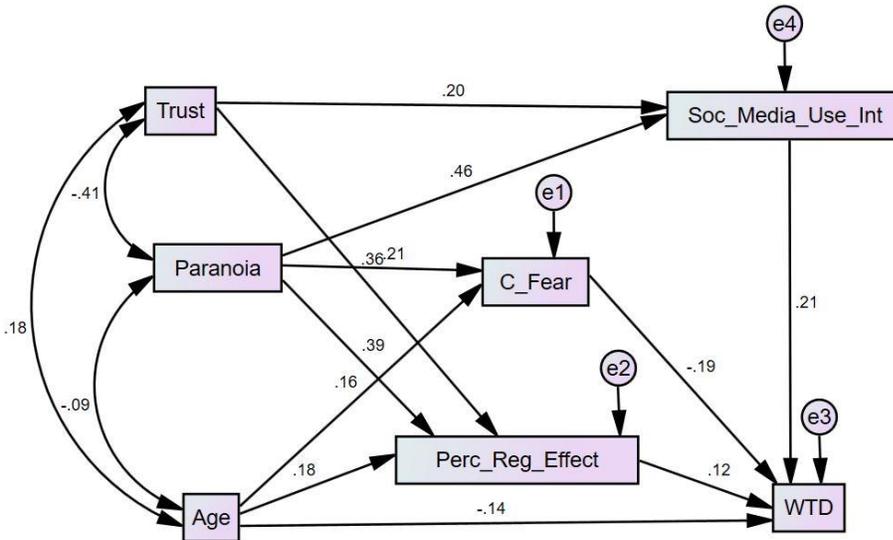


Figure 1. Structural model

The first three hypotheses were tested on the basis of a significance of total effects of trust, paranoia and age on the willingness to disclose personal data. After bootstrapping, H1 (the total effects of trust on the willingness to disclose personal data are positive) was confirmed, since standardized total effects of trust were $\beta=0.085$ with $p=0.001$. The total effects of paranoia on the willingness to disclose personal data were also significant, but positive: $\beta=0.107$; $p=0.002$. Hypothesis H2 predicted negative effects of paranoia, therefore H2 was rejected. H3 (the total effects of age on the willingness to disclose personal data are negative) was confirmed, $\beta=-0.147$; $p=0.001$.

The three other hypotheses tested the direct effects of age on cyber fear (H4), the perceived regulatory effectiveness (H5) and the willingness to disclose personal data (H6). All the three were confirmed, correspondingly: $\beta=0.155$; $p=0.000$; $\beta=0.180$; $p=0.000$; $\beta=-0.140$; $p=0.003$.

5. Discussion, conclusions and further research

An important finding of the study is that the model based on SET proved to be valid for the analysis of the willingness to disclose personal data in online shopping. As expected, a form of reciprocal exchange (social networking) significantly impacted the willingness to disclose data (a form of negotiated exchange). Trust had significant positive direct effects on reciprocal exchange, the perceived regulatory effectiveness and indirect effects on the willingness to disclose data (the negotiated exchange). The effects of paranoia differed from the expectations: the total effect of paranoia on the willingness to disclose personal data appeared to be positive. However, the result might be explained by analysing the effects of paranoia step-by-step.

First, paranoia positively influences cyber fear, as it is expected; cyber fear impacts the willingness negatively – again, as it is expected. However, paranoia positively influences the two factors that have positive impacts on the willingness to disclose personal data: these are the perceived regulatory effectiveness and the social media use integration. Though these effects are observed in some previous studies (Zimaitis, et al., 2020), the explanations of them, so far, have not been solid enough. It may be speculated that paranoid people are looking for their peers of a

similar type in social networks, and this makes the link between the factors positive. Moreover, it is very hard to comment on why paranoia links positively with the perceived regulatory effectiveness; the only similar finding was provided by Imhoff and Lamberty, 2018 who found that paranoia was not associated with low trust in the government (Imhoff & Lamberty, 2018).

The main attention of this study was the analysis on how age impacts the willingness to disclose personal data online in e-shopping. This aim has been achieved; it is obvious that age impacts the willingness negatively not only in all the modelled paths (direct, indirect) but also in total. It is proven, that age is positively linked to cyber fear. The study has also disclosed that age positively impacts the perception of regulation efficiency – this is understandable that more feared people are looking for a support of regulatory systems to protect their privacy. And, finally, it is observed that age itself has a direct negative impact on the willingness to disclose personal data. We suggest that in this case age should be understood not just a demographic parameter; it in a sense represents all the aggregated age-related factors that are not included into this specific model. We may only assume that a limited proficiency in using technologies, lower innovativeness and higher conservatism may be among them. This assumption puts ground for further studies that are suggested for considering these factors in a similar research.

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The Role of Sound in Brand Perception: a Mixed-Methodology Approach

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Abstract:

Sonic branding is one of the most promising marketing communication tools. The effectiveness of audio advertising campaigns is determined by the ability of sound elements to form a positive brand image in the consumers' minds. Our study aimed to measure the perception of audio advertising stimuli based on a combination of psychophysiological and sociological methods. The analysis of EEG data and subjective responses showed that a high level of experienced emotions is associated with interest in the advertised brand. We also found evidence on the role of jingles in forming positive brand associations.

Keywords: *sonic branding, perception of audio content, neuromarketing tools*

1. Introduction

The use of sound elements is considered as one of the most promising directions for the development of branding and marketing communications (Jackson, 2003; Gustafsson, 2019). The process of creating and managing a brand using audio content is called sonic branding or audio branding (Jackson, 2003, Haaksman et al., 2017, Herzog et al. 2020). Sonic branding implies the use of various sound elements (including jingles, sound logos, etc.) in brand promotion.

The interest in sonic branding is justified from a practical point of view. Current data on the European advertising market indicate that radio advertising is the most stable of the traditional channels of marketing communications, while audio advertising in digital services is the fastest-growing segment of the digital advertising market (Knapp, 2019).

2. Literature Review

With an increase in information noise, people become stricter to the consumed content, so improperly designed audio advertising may go unnoticed (Jackson, 2003). Marketers face the daunting task of developing audio content that is both recognizable, memorable, and positively perceived by the target audience (Gustafsson, 2015). One of the tools to solve this problem can be jingles, which are short sound bites that act as brand identifiers (Haaksman F. et al., 2017).

Jingles, sound logos, and other sonic branding elements can be mnemonically effective for linking a tagline with a brand in the absence of other advertising components that may resemble a brand (Yalch, 1991). However, there is a piece of evidence that music can distract from the cognitive processing of advertising information (Park, Young, 1986). In this regard, the use of a sonic branding should be carefully coordinated with the advertising message itself. Distracting and inappropriate sound can reduce the effectiveness of the advertising message (Chiranjeev, Leuthesser, Suri, 2007).

When developing a sonic branding strategy, it is important to understand the attributes of the brand, to clearly express these attributes through the jingle (Sound and Brand ..., 1999), and to work out the design elements of the jingle following the features of the brand (Jackson, 2003). Such elements, for example, are the tonality, structure, and length of the jingle. The emotional tone of the jingle is determined by the tonality (major or minor) (Kellaris, Kent, 1993), as well as its structure: an ascending sequence of sounds increases the emotional intensity of a musical fragment, while a descending sequence of sounds, on the contrary, calms (Bruner, Gordon, 1990). Jingles with a zigzag structure, such as Intel's, are more difficult to perceive and remember. However, they are associated with novelty, and therefore are relevant for high-tech companies (Krishnan, Vijaykumar, Kellaris, 2010).

Neuromarketing studies of the perception of sonic branding elements have not yet been carried out, although some results of the aspects of sound perception in advertising were studied. For example, one of the published studies based on eye-tracking and recorded facial expressions (as well as the galvanic skin response, GSR) revealed that the version of video advertising with musical accompaniment caused more emotions among the respondents. At the same time, the respondents watched both versions of the advertisement with the same involvement level (Cuesta, Martinez-Martinez, Nino, 2018).

3. Research design and data

We conducted a mixed-methodology empirical study to measure the perception of audio advertising stimuli. Respondents listened to advertising audio clips in the neuromarketing laboratory. They also filled out two questionnaires (before-study and after-study questionnaires). In the neuromarketing part of the study, quantitative methods of data

collection were used, like measuring the bioelectrical activity of the brain using electroencephalography (EEG) and evoked potentials. In the sociological part, respondents answered a questionnaire with several questions measuring the subjective memorability of the audio clips, as well as free associations with the audio clips and brands.

The study used promotional audio clips of nine international and Russian technology companies as stimulus materials. Each of the audio clips included the brand's jingle.

The total number of study participants was equal to 18. In the neuromarketing studies, the studied subgroups are determined before the actual start of the study based on several behavioural or demographic criteria relevant to the purpose of the study. Therefore, when conducting a neuromarketing study, there is no need for a sample representative of the entire population. (Hensel, 2017) Also, random noise when measuring brain activity during a neuromarketing study is not as high as when answering questions from a traditional study, which again justifies the sufficiency of small samples (Hensel, 2017). One of the neuromarketing studies on the level of involvement and emotional impact of advertising with musical accompaniment was conducted on a sample of 19 respondents (Ubaldo, Martínez-Martínez, Niño, 2018). In general, approximately 15-20 respondents are needed to ensure the internal validity of the neuromarketing study (Bercea, 2013).

4. Key results and findings

We conducted neuromarketing testing to obtain results indicating differences in the perception of audio clips. Neuromarketing testing included the application of two methods: method of evoked potentials and electroencephalography.

4.1 Method of evoked potentials

The analysis of brain bioelectrical activity of all respondents (example in Figure 1) did not allow us to detect any evoked potentials that potentially can be connected with the brain's reaction to external stimuli.

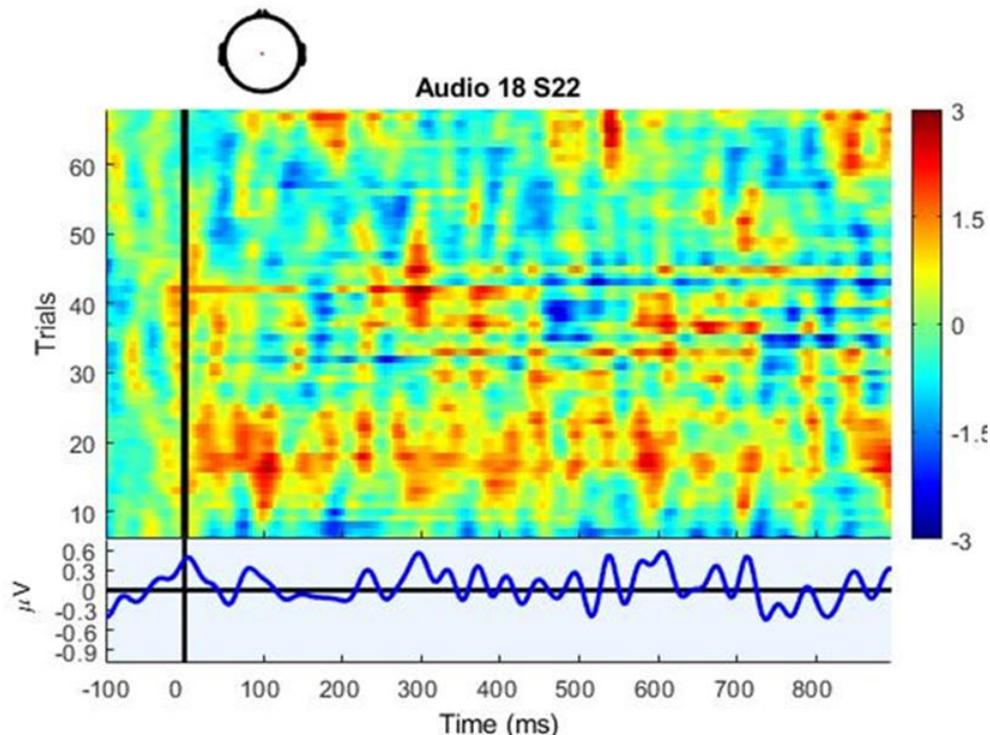


Figure 1. Brain bioelectrical activity of one of the respondents when listening to a Sony brand audio clip

Although the evoked potentials were not detected in any of the measurements, the obtained result does not mean the audio clips are not of interest. A more likely explanation is the impossibility of obtaining accurate estimations of the perception of sound advertising stimulus materials using the method of evoked potentials, which gives good results in assessing the perception of video advertising (Vecchiato et al., 2011, Sheresheva et al. 2015).

4.2 Electroencephalography

We also apply the electroencephalography method (EEG) to analyze recorded psychophysiological data.

Posteriorly dominant alpha rhythm occurs during relaxed and alert stages (Britton, 2016), when the subject is quietly resting (Kirstein, 2007). In this research, the power of alpha rhythm was used as a metric of involvement and the level of interest to the target advertising message: higher alpha rhythm severity is associated with loss of attention and relaxation when lower alpha rhythm severity is associated with involvement and interest in stimuli.

After listening to each of the audio clips, respondents were asked to fill out a short questionnaire on the subjective perception of stimulus material. Respondents were asked to rate each of the advertising audio clips they heard on a ten-point scale according to four parameters. Further, the "low" level corresponds to a rating of 1-2, the "mid" level lies in the range from 3 to 7, the "high" level lies in the range from 8 to 10.

Respondents who rated the positive emotions received from listening to advertising audio clips low (1-2 on a ten-point scale) have an average more pronounced alpha rhythm, which indicates a loss of interest in the audio clip. In contrast, among respondents who highly evaluated the positive emotions from listening to audio clips (8-10 on a ten-point scale), there was no loss of interest due to the weak intensity of the alpha rhythm at a 0.1% significance level (Figure 2).

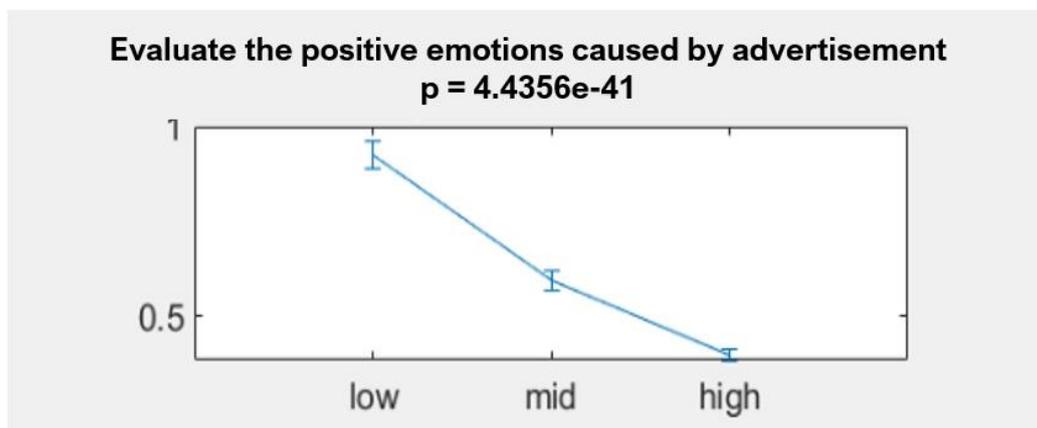


Figure 2. The average severity of alpha rhythm in different categories of respondents when answering the question about positive emotions caused by advertising

One of the questions of the questionnaire had a negative connotation and asked respondents to appreciate evaluate the negative emotions that advertising causes. Respondents who noted experiencing strong negative emotions (8-10 on a ten-point scale) also had a low alpha rhythm. Thus, even experienced strong negative emotions did not lead to a loss of interest in this study at a 0.1% significance level (Figure 3).

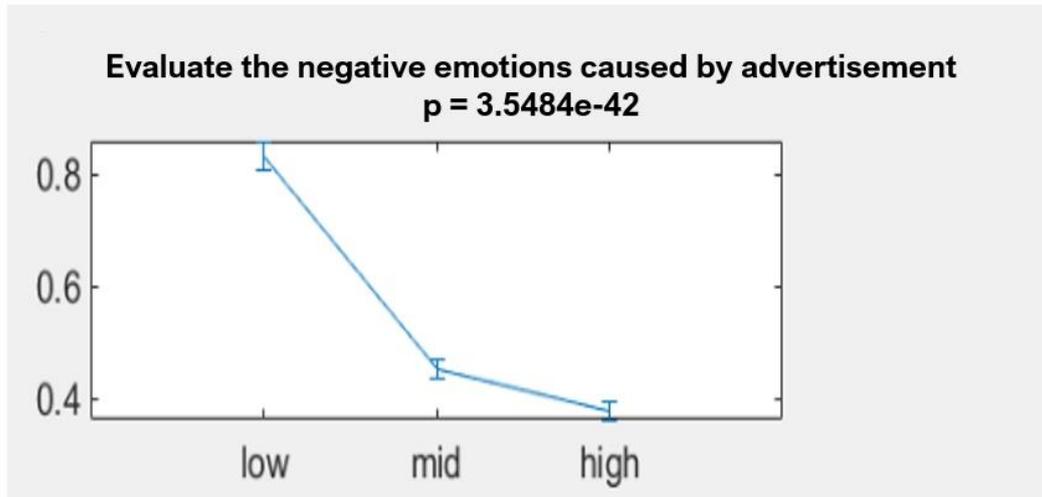


Figure 3. The average severity of alpha rhythm in different categories of respondents when answering the question about negative emotions caused by advertising

Respondents also had a pronounced alpha rhythm with a low interest in the advertised brand, that is, low interest in the brand is associated with a low interest in advertising audio clips at a 0.1% significance level (Figure 4).

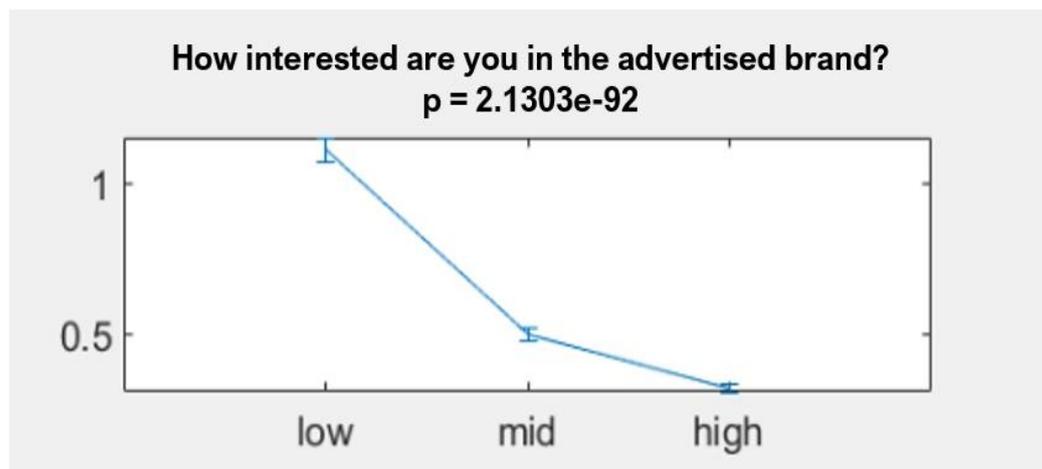


Figure 4. The average severity of alpha rhythm in different categories of respondents when answering the question about interest in the advertised brand

Figure 5 reflects the relationship between the average level of alpha rhythm and respondents' assessment of the length of advertising audio clips. The graph of this connection practically mirrors the graph in Figure 5: the length of the video is associated with a high alpha rhythm and a decrease in interest (at a 0.1% significance level).

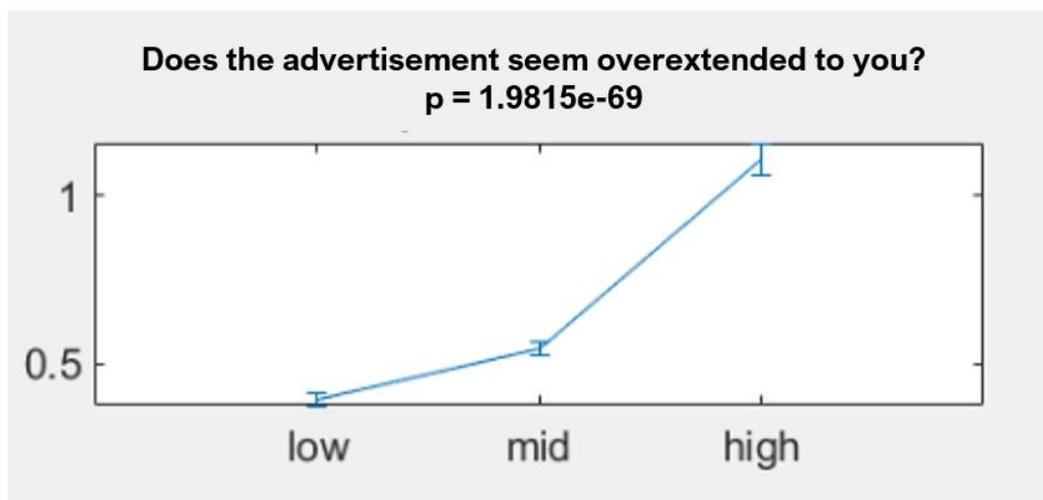


Figure 5. The average severity of alpha rhythm in different categories of respondents when answering the question about overextended length of advertising

Thus, it can be noted that a high level of experienced emotions (positive and negative) when listening to audio clips is associated with increased interest, while too long from the respondents' point of view audio clips are associated with loss of interest.

4.3 Survey data

The questionnaire results are presented in Table 1. In our study, we focus on two respondents' attitudes towards audio clips: subjective memorability and free associations.

Three days after the study respondents were asked to list all memorized brands of audio advertisement clips (as an open question without any prompts). Then they were also asked to choose memorized brands from the list of brands, which included also some brands not used in the research (as a multiple-choice question where brands were used as prompts).

We also separately analyzed positive and negative associations with a jingle and with a brand. Positive associations included such features as "modern", "attractive", "clear" etc. Examples of negative associations were "old", "low quality", "elusive" etc.

Brand advertised in an audio clip	Subjective memorability (N=18)		Free associations (N=18)			
	Without a prompt	With a prompt	With a jingle		With a brand	
			Positive	Negative	Positive	Negative
AUDI	5	7	6	6	17	0
BMW	6	11	9	5	15	2
Intel	4	10	14	0	15	1
LG	6	9	13	2	11	3
Mazda	8	14	8	6	11	5
Megafon	2	7	9	5	10	5
Samsung	4	10	10	3	15	0
Sony	1	8	7	2	16	1
Svyaznoy	1	12	7	3	7	7

Table 1. Results of the after-study questionnaire analysis (total number of respondents N=18)

The Mazda audio clip, rated as the most boring and overextended, nevertheless has the greatest subjective memorability (after the study, 8 respondents mentioned it without a prompt it, 14 respondents with a prompt). Mazda jingle is the leader in the number of negative associations (6 out of 18), but this is not an obstacle to remembering the jingle: a test for spontaneous knowledge showed that more than half of respondents recognized Mazda jingle (10 out of 18).

The free association test showed that for the Intel brand there is the greatest match between the number of positive free associations with jingle and brand (14 and 16, respectively). Besides, the Intel jingle, which has a zigzag structure (Figure 6), was more often described as technical, technological (6 respondents), electronic (2 respondents), and digital (1 respondent). Jingle with the second greatest number of positive associations (13), the LG jingle, also has a zigzag structure.



Figure 6. Zigzag structure of the Intel jingle

5. Implications and further researches

Our study revealed some important implications for both researchers and brand managers.

From the methodological point of view, our results provide useful insights on the applicability of some well-spread neuromarketing and sociological methods in audio branding studies. For instance, we found that method of evoked potentials has some restrictions as a measure of sound stimuli perception, while alpha rhythm analysis based on EEG-recorded data could be very useful for this purpose.

Our recommendations for brand managers include two major ideas. On the one hand, we found some evidence that sonic branding elements can potentially provoke positive associations with a brand. On the other hand, the mechanisms of the impact of sound stimuli on consumer perception remain largely unexplored, which determines the importance of investments in the development of this area of research.

One of the most promising directions of further researches is a more detailed psychophysiological analysis of emotions linked to sonic branding elements. This future analysis can focus on the activity in the ventromedial prefrontal cortex (leads F3, F4) induced by emotional audio stimuli (Bercea, 2012). Emotional valence can be estimated by analyzing the frontal interhemispheric asymmetry. The presence of alpha rhythm (8-13 Hz) in the left frontal lobe (F3) will indicate positive emotions experienced by the respondent in response to the presentation of the stimulus (Morin, 2011). If activity is observed in the right frontal lobe, then this will indicate a surge in negative emotions.

In general, neuromarketing studies of audio stimuli perception are still less developed than studies of visual stimuli. Thus, many stakeholders (for example, sonic branding agencies, radio stations, streaming services) cannot get an assessment of objective psychophysiological reactions to their content. The development and testing of neuromarketing methods for evaluating audio content can solve this problem, and at the same time, promote the development of a new promising research area.

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