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Gamified package: Consumer insights into multidimensional brand engagement

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Gamified package: Consumer insights into multidimensional brand engagement

Abstract

Although most gamification studies share the idea that customer engagement is one of the expected outcomes of gamification, they tend to treat engagement one-dimensionally as a psychological outcome of gamification. The study explores from the consumer perspective how benefits stemming from gamification and consumer brand engagement are dimensionally interconnected in the context of food packaging. This context enables extending the current understanding of the various ways in which gamification may enable brands to interact with consumers in their everyday lives and boost consumer brand engagement. The data were generated through qualitative Internet-mediated group interviews (N=99). The findings show four consumer benefits of gamified packaging – functional, hedonic, social, and educational – which are further elaborated in terms of three dimensions (cognitive, emotional, and behavioral) of consumer brand engagement to create a multidimensional typology. The study highlights managerial implications in terms of relying on consumer-driven innovations when designing gamification.

Keywords: Gamification, Consumer brand engagement, Consumer benefits, Packaging, Food, Internet-mediated group interviews

Gamified package: Consumer insights into multidimensional brand engagement

1. Introduction

Most gamification studies share the idea that customer engagement is one of the expected outcomes of gamification (e.g., Berger et al., 2018; Hamari et al., 2014; Harwood & Garry, 2015; Hofacker et al., 2016; Jang et al., 2018; Lounis et al., 2013; Lucassen & Janssen, 2014; Mulcahy et al., 2018; Teotónio & Reis, 2018; Xi & Hamari, 2019; Zichermann & Cunningham, 2011). Even the early definitions of gamification emphasized that gamification works because video games demonstrably engage users; thus, employing similar game design elements in non-game contexts should arguably do the same (Deterding et al., 2011).

Despite this obvious link between gamification and engagement, the connection is more challenging from a marketing perspective. Although major conceptual advances in the field of consumer brand engagement have taken place (e.g., Hollebeek et al., 2019) the extant gamification research largely appears to neglect recent discussions in marketing on consumer brand engagement (for exceptions, see Berger et al., 2018; Xi & Hamari, 2019). To illustrate, in marketing literature, consumer brand engagement consists of cognitive, emotional, and behavioral dimensions (Hollebeek, 2011a; Hollebeek et al., 2019), whereas in most gamification studies engagement is treated one-dimensionally as a psychological outcome of gamification (Hamari et al., 2014).

Research has focused on a multitude of reasons for customers to engage in gameful experiences. Studies have, for instance, scrutinized the roles of cognitions and emotions (Mullins & Sabherwal, 2018), consumer characteristics (Jang et al., 2018; Hofacker et al., 2016), usage contexts (Hofacker et al., 2016), motivational user experiences (Wolf et al., 2019), and types of rewards (Hwang & Choi, 2019; Harwood & Garry, 2015). Recently, the

benefits of gamification have emerged as a relevant topic within studies on gamified consumer experiences (Jang et al., 2018). This is particularly interesting as the consumer benefits are iterative, interlinked with consumer engagement (Hollebeek et al., 2019). While the number of studies is still very low, further studies focusing on the benefits of gamification are called for (Jang et al., 2018). Related to the benefits, past studies tend to concentrate on very particular game design elements, such as points and awards, while neglecting other, potentially more interesting elements contributing to the benefits (Hofacker et al., 2016).

Gamification research has its roots in the disciplines of human-computer interaction and game studies (e.g., Hamari et al., 2014; Lounis et al., 2013; Xi & Hamari, 2019), and consequently many of the studies focus on games, game design and the interrelationship between human and machine. In this sense, the innovation process entwined with various new applications of gamification is largely producer-centric (von Hippel, 2009) stemming from the technological design perspective. Relatedly, prior research has examined, for instance, the relationship between gamification and other variables (e.g., Berger et al., 2018; Harwood & Garry, 2015; Müller-Stewens et al., 2017; Xi & Hamari, 2019) and the effects of various applications of gamification (e.g., Jang et al., 2018; Mulcahy et al., 2018; Oppong-Tawiah et al., 2018). Although gamification is a rapidly emerging area within marketing management and business studies (e.g., Hofacker et al., 2016; Jang et al., 2018; Müller-Stewens et al., 2017; Robson et al., 2014; Hamari et al., forthcoming), a similar, mostly quantitative orientation (Hamari et al., 2014) is apparent in these fields as well. To illustrate, the few studies that take the multi-dimensionality of brand engagement into account (Berger et al., 2018; Xi & Hamari, 2019) quantitatively test associations between gamification and brand engagement. Thus, although there are calls for studies in different areas of marketing (Hamari et al., 2014), such as consumer behavior (Hwang & Choi, 2019), service marketing (Huotari & Hamari, 2012, 2017) and brand management (Xi & Hamari, 2019), more

consumer research that takes a qualitative approach to understanding gamification in consumers' everyday experiences is needed.

In response to these background issues, we begin from consumers' deliberations on how their daily lives could be eased or enlivened by different benefits provided by gamified elements attached to packaging. The aim of the study is to explore from the consumer perspective how benefits stemming from gamification and consumer brand engagement are interconnected in the context of food packaging. To achieve this aim, we pose three research questions. First, how do the three theoretical constructs (gamification, consumer brand engagement, and consumer benefits) overlap in existing research? Second, what kind of benefits do consumers expect to receive when engaging with a gamified package? Third, how do the detected benefits relate to the dimensions of consumer brand engagement in the context of food packaging?

The study is executed within the context of packaging, with a specific focus on food packages, as consumers interact with branded food packages almost every day (Nilsson et al., 2015). This empirical context enables us to extend the current understanding of the various ways in which gamification may enable brands to interact with consumers in their everyday lives and boost consumer brand engagement (Vivek et al., 2012; Graffigna & Gambetti, 2015; Machado et al., 2019). With gamification aided by mobile technology, the packaging's role of capturing attention, evoking pleasure, and informing about the product and the brand (e.g., Kauppinen-Räsänen, 2014; Kauppinen-Räsänen & Jauffret, 2018; Kauppinen-Räsänen, van der Merwe, & Bosman, in press; Niemelä-Nyrhinen & Uusitalo, 2013) may be extended to contribute with extensive brand-related experiences (e.g., Andreini et al., 2018). As Hofacker et al. (2016, p. 26) state: "Traditionally, customers enter the retailer's space, but with mobile devices, retailers can invert the paradigm and enter the customer's personal environment." Therefore, as consumers value packaging that interacts with them (Aday &

Yener, 2015; Hakola, 2013; Rundh, 2016) and provides value-in-use (e.g., Niemelä-Nyrhinen & Uusitalo, 2013), food packaging opens up a novel and intriguing arena for gamification.

The theoretical contribution of the study is twofold. First, the study contributes with a multidimensional typology on the interconnections between gamification benefits and consumer brand engagement emerging in the context of food packaging. Thus, the current study extends prevailing theory on gamification by showcasing its multidimensional interaction with consumer brand engagement, instead of regarding engagement *merely* as a psychological outcome of gamification. Second, based on consumers' views, ideas, and expectations on gamified packaging, the study contributes with consumer-driven innovations in a way that is grounded in the mundane lives of consumers (von Hippel, 2009) as they interact with food packages. In alignment with this, the managerial implications of the study emphasize the importance of considering context- and application-specificity in designing gamification.

The paper proceeds as follows. The theoretical framework consists of three sections: gamification, consumer brand engagement, and consumer benefits. Each of the sections elaborates interconnections between two of the theoretical constructs at a time, while the final section discusses the interlinkages of the three theoretical constructs and presents the theoretical framework of the study. After that we discuss the methodological conduct of the study using qualitative Internet-mediated group interviews (N=99). Our findings show four consumer benefits of gamified packaging – functional, hedonic, social, and educational – which are further elaborated in terms of three dimensions of consumer brand engagement. In the concluding section, we highlight the theoretical contribution and managerial implications, and give suggestions for further research.

2. Gamification, consumer brand engagement, and consumer benefits: Integrative framework

2.1. Gamification and its interconnections to consumer engagement

The commonly accepted definition of gamification regards it as the application of game design elements in a non-game context (Deterding et al., 2011). Huotari and Hamari (2017) criticize definitions that are based on mechanistic and game design processes, such as those by Deterding et al. (2011) and Werbach (2014). Instead, gamification should be regarded as a service provided for consumers to engage in a gameful experience (Huotari & Hamari, 2017). In this regard, the games played while consuming are unavoidably co-created between consumer and producer. While the producer creates frameworks, rules, and contents for the game through various design elements, the consumer contributes by engaging in playing and interacting with other players (Huotari & Hamari, 2012). Gamification is fundamentally linked to engagement, as its usage is usually justified by its positive effects in relation to engagement (e.g., Hofacker et al., 2016; Jang et al., 2018; Lounis et al., 2013; Lucassen & Jansen, 2014; Mulcahy et al., 2018; Teotónio & Reis, 2018; Zichermann & Cunningham, 2011; Xi & Hamari, 2019).

A multitude of gamification studies have focused on investigating the relationship between various game design elements and engagement, and thus contributed with various classifications of game design elements and their interconnections to engaging users. One approach to game design is provided by the recent study by Xi and Hamari (2019) who categorize game design features relying on gameplaying motivations: immersion, achievement, and social (e.g., Yee, 2006; Luomala et al., 2017). *Immersion*-related features such as avatars, storytelling, and roleplay lure users to immerse themselves in the game mechanics. *Achievement*-related features include badges, challenges, goals, and leaderboards,

and attempt to increase users' sense of accomplishment. *Social*-related features seek to enhance users' social interaction, such as by creating opportunities for collaboration. Of these features, achievement and social were found to be positively connected to all dimensions of brand engagement (emotional, cognitive, and social), whereas immersive-related features were positively related only to social brand engagement (Xi & Hamari, 2019). Similarly, Lucassen and Jensen (2014) found that marketing executives expect achievement-related features, such as competitions and leaderboards, to be linked with engagement, as well as social-related features (e.g., helping a friend, feeling part of the group). Finally, gamification principles are suggested to facilitate consumer engagement through the psychological processes involved in the experiences of hope and compulsion (Eisingerich, et al., 2019).

Gamification may also be approached by categorizing different game design elements. In this regard, a widely known framework to design games is Schell's (2008) Elemental Tetrad Model, consisting of story, mechanics, aesthetics, and technology, which Hofacker et al. (2016) suggest applying in gamification. According to Hofacker et al. (2016) *story* gives context to the game and provides meanings for the gaming experience, *aesthetics* mean the look or feel of the game in which, for instance, visual imagery is used to create immersion, and *technology* refers to the way the medium itself, such as mobile device, creates possibilities for different gaming experiences. A related framework is that by Werbach and Hunter (2012, 2015), who divide game design elements into three groups that operate on different levels of the game design, namely dynamics, mechanics, and components. Although these two frameworks take somewhat different views on game design elements, they are linked, in particular, in terms of mechanics, as all three elements by Werbach and Hunter (2012, 2015) may be interpreted to belong to Schell's (2008) *mechanics*.

Thus, in Werbach and Hunter's (2012, 2015) classification, *dynamics* are the higher-level aspects of the gamified system that are managed when developing the game, such as the player relations (e.g., teams) and progression during the gaming experience, and *mechanics* are ways to achieve the desired dynamics (e.g., Teotónio & Reis, 2018; Werbach & Hunter, 2012, 2015). These include the rules set up for the system and techniques applied in the gamification process, such as challenges, feedback, and competition among players, and reward distribution based on these. According to Mulcahy et al. (2018), in relation to knowledge and enjoyment gained from a gamified experience, feedback influences knowledge creation, while challenges and awarding points influence both the creation of enjoyment and knowledge. *Components* in turn are the practical game design elements that are used to create the selected mechanics (e.g., points and levels for progression and avatars for self-representation) (Teotónio & Reis, 2018; Werbach & Hunter, 2012, 2015). Mulcahy et al. (2018) found that personalized avatars create relatedness between the player and the gamified system by increasing immersion and perceived value, which facilitates engaging the players in the early phases. For longer-term engagement, challenge is more important after the player is successfully onboarded to the experience.

Similarly, Nicholson (2015) divides usage of gamification elements into two categories: reward-based gamification for short-term changes and meaningful gamification for potentially long-term changes. Reward-based gamification incorporates the visible gaming elements, badges, levels, leaderboards, achievements, and points, whereas meaningful gamification is created by recognizing the fact that play is optional and that not everyone will play (Nicholson, 2015). Berger et al. (2018) discovered that consumers do not become engaged with a brand when participating in a gamified experience is compulsory, and that time pressure in gaming diminishes cognitive brand engagement. Instead, meaningful gamification, such as stories or progress, creates situations that enable willing participants to

find meaning in the activity, which can increase internal motivation to engage with the activity more deeply (Nicholson, 2015). Gamified interactions, which are highly interactive and optimally challenging for the player, are found to be positively associated with both emotional and cognitive dimensions of brand engagement (Berger et al., 2018). As failed gamification may induce unpleasant consumer experiences (Robson et al., 2014), it is suggested that gamified elements should be integrated seamlessly into the consumer's buying process (Lounis et al., 2013) and that participation should always be voluntary (Huotari & Hamari, 2012) to create positive brand engagement.

2.2. Consumer brand engagement and its interconnections to consumer benefits

Gamification research typically takes engagement as a given concept; in the marketing field, the idea of engagement is not that simple, as shown in a multitude of recent theoretical elaborations on engagement-related constructs. The interest stems from recognizing the need to understand consumer engagement that goes beyond purchase – the various ways consumers interact with the brand without purchasing or even planning to purchase it (Vivek et al., 2012). Engagement derives from lived brand experiences in the consumer's everyday activities, and – in particular – the adoption of brands into the consumer's life story (e.g., Graffigna & Gambetti, 2015; Machado et al., 2019). Engagement is based on positive consumer-brand interactions, which at best lead to a relation in which the engaging brand is paralleled with a “life mate” (Graffigna & Gambetti, 2015). This recognition, in turn, has resulted in the emergence of somewhat overlapping concepts (Hollebeek et al., 2019), including customer engagement (Vivek et al., 2012; Harwod & Garry, 2015), customer engagement behaviors (Brodie et al., 2011; Harwod & Garry, 2015; Jaakkola & Alexander, 2014), and consumer brand engagement (Hollebeek et al., 2014; Hollebeek et al., 2011). Similarly, the digitalization of marketing practices has highlighted related constructs, such as

brand community engagement (Kuo & Feng, 2013) and brand engagement platforms (Ramaswamy & Ozcan, 2018).

Consumer engagement (CE) consists of cognitive, emotional, and behavioral outcomes related to an interactive experience with a firm (Hollebeek et al., 2014; Hollebeek et al., 2011; Hollebeek et al., 2019). The cognitive dimension of consumer brand engagement refers to “a consumer's level of brand-related thought processing and elaboration in a particular consumer/brand interaction” (Hollebeek et al., 2014, p. 154), whereas the emotional dimension means “a consumer's degree of positive brand-related affect in a particular consumer/brand interaction” (Hollebeek et al., 2014, p. 154). The emotional dimension is found to be linked in consumer engagement through variation in service experience (Kumar et al., 2019). Although consumer engagement also includes the third, behavioral, dimension: “a consumer's level of energy, effort and time spent on a brand in a particular consumer/brand interaction” (Hollebeek et al., 2014, p. 154), the construct of customer engagement behaviors (CEB) explicitly focuses on those various *behaviors* (Brodie et al., 2011). These behaviors refer to those actions that go beyond the fundamental transactions, take place in interactions between the focal object and/or other actors, and stem from customers' motivational drivers (Brodie et al., 2011; Harwood & Garry, 2015; Jaakkola & Alexander, 2014). Aligned with this, Wong and Merriles (2015, p. 577) underline that physical activation is “the highest level in terms of customer brand engagement.” This behavioral activity engages due to the energy, effort, and time the consumer devotes to the brand (Hollebeek, 2011b, p. 569).

In this paper, we follow Hollebeek et al.'s (2019) argumentation of consumer engagement with a brand to highlight its multidimensionality, context-dependency, and voluntary and dynamic nature. Therefore, with an emphasis on direct and physical consumer-brand interaction, customer brand engagement is conceptualized as “the level of an individual

customer's motivational, brand-related and context-dependent state of mind characterized by specific levels of cognitive, emotional, and behavioral activity in direct brand interactions" (Hollebeek, 2011a, p. 790). To emphasize the experiential nature underlying the interaction, customer brand engagement is defined as: "A consumer's positively valenced brand-related cognitive, emotional and behavioral activity during or related to focal consumer/brand interactions" (Hollebeek et al., 2014, p. 154). Engagement evolves when the brand interacts with the consumer, and multi-activates – not only mentally and emotionally, but also physically. For example, different features of gamification enable consumer activation in varying ways and are thereby associated with different dimensions of brand engagement (Xi & Hamari, 2019; Berger et al., 2018).

In devoting a substantial amount of resources (time, knowledge, etc.) while engaging with a brand, consumers directly or indirectly generate and receive a multitude of benefits (Harwood & Garry, 2015; Jaakkola & Alexander, 2014). Benefits are thus viewed as drivers for brand community engagement (Kuo & Fen, 2013) and usage of gamified mobile applications (Jang et al., 2018) as well as outcomes of consumer engagement with the brand (Hollebeek et al., 2019) and consumer engagement in virtual gamified platforms (Harwood & Garry, 2015). To illustrate, Kuo and Feng (2013) discovered that several types of benefits are positively and significantly associated with engaging with a brand community. Hollebeek et al. (2019, p. 169) further explicate the conceptual interconnections by highlighting that although some benefits are perceived only after engaging with the brand, some of the benefits may occur during the interaction. Furthermore, benefits and brand engagement are iteratively linked, as benefits usually develop over time due to multiple interactions with the brand, and thereby induce future interactions and strengthen consumer brand engagement (Hollebeek et al., 2019). Therefore, extant research appears to recognize that consumers' brand-related engagement is highly interrelated with the consumer benefits.

2.3. Consumer benefits and their interconnections to gamification

Benefits represents one of the classic marketing concepts, referring to the idea that consumers do not buy products due to their attributes, but due to benefits they get from buying or using the product (e.g., Hooley & Saunders, 1993; Sheth et al., 1991). As stated above, recent discussions on benefits have interlinked them with both consumer brand engagement and gamification. For instance, Jang et al. (2018) discovered that different gamified customer benefits influence behavioral engagement. Gamification is seen especially as a way to offer non-monetary benefits for consumers (Hofacker et al., 2016; Jang et al., 2018), and thereby induce interaction with the brand.

Much of the discussion on benefits has concentrated on creating typologies of different kinds of benefits. Kuo and Feng (2013) provide a review article on existing studies and following their categorization, *learning* benefits (e.g., purposive, functional, cognitive, and problem-solving support-related benefits), *social* benefits (e.g., interpersonal connectivity, social integrative benefits), *self-esteem* benefits (e.g., social enhancement, self-enhancement, personal integrative benefits), and *hedonic* benefits (e.g., entertainment benefits) are recognized. Prior research indicates that social benefits, for instance in terms of reciprocal benefits stemming from using gamification, strongly predict how the user sees gamification, and whether (s)he is likely to continue its usage (Hamari & Koivisto, 2014).

Jang et al. (2018), on the other hand, rely on uses and gratifications theory and categorize benefits as *epistemic* (i.e., increasing information and understanding), *social integrative* (i.e., strengthening the relationship with others), and *personal integrative* (i.e., strengthening credibility and social status among others). Interestingly, they (Ibid.) found that all three types of benefits are positively associated with engagement; however, personal integrative benefits were the most pronounced benefit driving greater engagement. Hofacker

et al. (2016) share the idea that epistemic and social benefits may possibly be fostered through gamification mechanics, as appropriate game design may facilitate the consumer's skill development and learning as well as social interactions. Also, reversal findings confirm the role of benefits when implementation of the gamified brand platform fails to deliver expected rewards to the customer, which shows negatively in consumer engagement (Harwood & Garry, 2015).

2.4. Gamified package from the technological, marketing, and consumer perspective

The theoretical framework of the current study consists of three constructs: gamification, consumer brand engagement, and consumer benefits that are explored in the context of food packaging (Figure 1). Each of the constructs also highlights the disciplinary perspectives from which gamified package may be approached. Gamification itself provides a technology whose design should preferably be applied from the marketing management perspective to induce consumer brand engagement, and finally, from the consumer experience perspective, to provide benefits for the consumer. In the sections above, we scrutinized the theoretical groundings of each of the constructs and their overlap. In this way, we can recognize that the constructs are highly interrelated and their elaboration together yields novel ideas for gamification through packaging.

PLEASE INSERT FIGURE 1 HERE

Packaging offers an intriguing channel for boosting consumer brand engagement through benefits provided by gamification – after all, most products are packaged, and therefore packaging is an integral part of consumers' brand experience (e.g., Andreini et al., 2018). Packaging serves as a brand medium, a brand's in-store touchpoint, and its “voice” at the

point of purchase (Husić-Mehmedović et al., 2017; Kauppinen-Räsänen, 2014; Kuvykaite et al., 2009; Löfgren, 2008). Thereby, packaging has evolved from providing functional benefits (containing, protecting, and preserving products) to delivering communicative benefits through written text (information about the product and its use, and promoting brands) and packaging design (non-verbal communication) (e.g., Fernqvist et al., 2015; Kauppinen-Räsänen, 2014; Kauppinen-Räsänen & Uusitalo, 2015; Krishna et al., 2017; Niemelä-Nyrhinen & Uusitalo, 2013). Furthermore, consumers value packaging that interacts with them (Aday & Yener, 2015; Hakola, 2013; Lorenzini et al., 2018; Rundh, 2016); for example, the experience-seeking consumer appreciates packaging that tells a story (e.g., Solja et al., 2018). In this regard, it is possible to create consumer brand engagement by attaching gamified elements to the packaging. For instance, food and beverage companies have introduced packages containing codes that can be redeemed in mobile applications to receive brand-related items (e.g., Coca-Cola's "Sip & Scan") or invites to play mini-games or brand-related (adver)games (e.g., Burger King's advergaming "Sneak King").

The interconnections between gamification (technological design perspective), consumer brand engagement (marketing management perspective) and consumer benefits (consumer experience perspective) may actualize when the consumer interacts with a gamified package. Gamified elements attached to the packaging may even physically activate the consumer to act (e.g., solve a quiz), whereby packaging has the potential to increase brand awareness and engage the consumer through a game-related brand experience, and to create benefits that influence current and future brand engagement (Hollebeek et al., 2019). As the study aims at exploring gamified packaging from the consumer perspective, the empirical investigation begins with exploring potential consumer benefits of gamified packaging, which are then linked to marketing management through analyzing the interlinkages with consumer brand engagement.

3. Methodology

In effect, the integrative framework brings together the ideas and themes from the literature review that are further empirically investigated in the Internet-mediated group interviews (Saunders et al., 2008). In the following, we first present the groundings for the methodological choices more generally, and finally describe how the theoretical constructs presented in the integrative framework are inherently interlinked to the discussion threads carried out in the online group interviews.

3.1. Methodological approach

To obtain deep new insights into how consumers see gamified packaging fitting into their lives, an exploratory, qualitative study was designed. The study applied Internet-mediated group interviews (Saunders et al., 2008) to generate insightful discussion around the study topic and enable us to answer the empirical research questions (Hines, 2000). The Internet-mediated group interviews follow the general idea of focus groups; the emphasis is on informal interaction between participants, although researchers participate by initiating discussion themes, and pose further questions (Eriksson & Kovalainen, 2016, p. 183). The difference is that discussion took place in a closed online platform in which consumers engage using pseudonyms. Despite the potential drawbacks, such as missing non-verbal communication, using an online channel to conduct group interviews allows access to more sensitive and thoughtful data, as participants can participate in their homes or other safe settings as well as rich and contextually-bound data, as the consumers were able to share not only writings, but also pictures and videos of their daily doings (Hesse-Biber & Griffin, 2013).

3.2. Research participants

The national context of the study, Finland, can be viewed as a suitable location for producing insights that apply more generally to Western societies. In relation to Finnish food culture, the ongoing globalization has generally homogenized food consumption patterns in Europe (Gracia & Albisu, 2001; Syrjälä, Luomala & Autio, 2017). For instance, when compared to other Nordic countries, Finland does not appear to be dramatically different (Holm et al., 2015). Similarly, in terms of technological development, Finland is characterized as an example of a new information economy with a high proportion of employment in knowledge-intensive industries and a high level of information and communication technology usage (Anttila & Oinas, 2018). Therefore, the Finnish context appears appropriate to elaborate on the possibilities of gamified packages in a way that may be transferable to other Western welfare societies.

The participants were recruited from a commercial consumer panel of 15,000 Finnish consumers who share an interest in food issues. In total, 99 participants were recruited based on a pre-questionnaire concerning their daily lives (i.e., food consumption styles, hobbies) and socio-demographics. For the total sample, diversity was sought to yield rich data via differing perspectives (Gaiser, 2008, p. 293). The participants ranged in age from 18 to 65 and lived in various types of households in different parts of Finland. Collecting digital data is regarded as a way to democratize data, for instance in terms of reaching consumers living in sparsely populated areas (Eriksson & Kovalainen, 2016, p. 109-110), as in the case of Finland. Despite the overall diversity of our sample, female participants were over-represented. This is common and acceptable in studies dealing with food consumption issues (e.g., Ares, et al., 2010), due to the fact that women are still more interested in food-related questions than men and do the majority of the grocery shopping and cooking in households (Paasovaara, et al., 2012). Moreover, this bias in our sample may actually be productive from

the theory-building perspective of our study, as it has been found that women tend to engage with gamified apps more than men (Eisingerich et al., 2019).

However, in accordance with the aim of the study and aligned with the general idea behind using focus groups, the intention was not to provide statistically generalizable results (Eriksson & Kovalainen, 2016, p. 187), but to generate richness to the discussion by selecting consumers who are knowledgeable about the research topics. Therefore, the sampling method was purposive, as the participants were sampled into three smaller groups, with each group including participants who have certain kind of experience on the research topics (gamification, doing groceries) and would potentially offer variety in their views through differing backgrounds (Gaiser, 2008, p. 293). Further, as in offline focus groups, it is expected that social interaction and group cohesion can be fostered by somewhat homogeneous groups (Eriksson & Kovalainen, 2016, p. 186). The three groups consisted of 25-35 participants having something in common. Thus, the groups were split up so that they shared something in terms of lifestyles or interests: the first group consisted of “active game-players” (i.e., consumers who play digital or mobile games daily or several times a week), the second group included “healthy-eating sport enthusiasts” (i.e., consumers who regard the healthiness of food as either the first or second most important criterion for their food choices, and exercise daily or several times a week), and the third group was a “family group” (i.e., consumers who have at least one child living at home). Furthermore, the groups were divided to stimulate discussion about participants’ everyday lives in a way that may be further enlightened by social interaction within the groups.

3.3. Data generation process

During the data generation period of four months, the three online groups followed an identical discussion script examining packaging and gamification in the food consumption

sphere from different angles. The online focus groups discussed four general themes (packaging in general, gamification in retail settings, package-related mobile game, and campaign-based gamification) in eight discussion threads.

The first two threads concentrated on packaging: one theme revolved around good and bad packaging characteristics in different everyday food consumption settings (e.g., at home, at work), and the other around benefits participants see in their favorite packaging. The third and fourth threads aimed at uncovering insights into how participants use mobile technology in retail settings, and how gamification and game design elements would provide various novel benefits in these settings. The three following themes related to sharing ideas about and trying out versions of a mobile game being developed with commercial food industry collaborators to promote healthy snacking. This location-based treasure hunting game consisted of physical (e.g., finding actual real-life snack products as prizes in retail stores) and digital (e.g., finding treasures in the game world) gamification aspects. Finally, as gamified solutions are often campaign-based, rather than permanent qualities of a brand packaging, the final discussion thread focused on revealing participants' opinions and experiences of gamified marketing campaigns.

As highlighted in section 2.4., the theoretical constructs presented in the integrative framework – consumer brand engagement, gamification, and consumer benefits – yield these eight discussion threads. Table 1 specifies how the interconnections between the theoretical constructs are operationalized with the help of eight carefully designed discussion threads. Therefore, Table 1 serves as a visual bridge between the conceptual and empirical parts of our research.

PLEASE INSERT TABLE 1 HERE

3.4. Data analysis

The qualitative data analysis resembled interpretive content analysis (Eriksson & Kovalainen, 2016, p. 120-125), and it consisted of two main phases that were informed by extant theory. In the first phase, the aim was to understand participants' views on what types of benefits they see gamified packaging provides them in various settings of their everyday lives. In the beginning, the eight discussion threads were read in their entirety to find out any discussion on potential benefits that participants could attach to connecting gamification and food-related daily doings, such as grocery shopping or interacting with family and friends. Thus, the initial categorization allowed data-driven themes to emerge. However, this phase consisted of iterative readings between data and theory, and the theory on benefits typologies (e.g., Kuo and Feng, 2013; Jang et al., 2018) was used as a guidance, while allowing new benefit types to come up. To strengthen the credibility of our analytical reasoning, we generated subcategories for each of the plausible benefit types. Thus, in order for a type to be accepted as a final benefit type, it needed to, for instance, be able to induce ideas for game design elements and potential types of applications (i.e., the columns of the matrix in Table 2). Finally, after several rounds of discussion and amelioration of analysis in the research group, we were able to arrive at the typology of four benefits of gamified packaging: functional, hedonic, social, and educational. It should be noted that the three discussion groups were isolated only in terms of the practical conduct of the online interaction, whereas the emergent themes and discussion overlapped in different groups. As Gaiser (2008) encourages, the use of several online focus groups enabled us to enhance the credibility of the research, as all of the detected types of benefits occurred in all three groups.

The second phase of analysis was more clearly theory-driven, as this phase was focused on finding theoretical connections between the ways they appear in the data. In this phase, we concentrated on finding out interconnections between the types of benefits

discovered in the first analytical phase and the dimensions of consumer brand engagement (cognitive, emotional, and behavioral) stemming from previous research (e.g., Hollebeek et al., 2014). Relating to interpretative content analysis (Eriksson & Kovalainen, 2016, p. 124), the key idea was to analyze what kind of *relationships* emerge between concepts. Through these analytical phases, we created the multidimensional typology on the interconnections between gamification benefits and consumer brand engagement as emerging in the context of food packaging.

4. Findings

4.1. Benefits of gamified packaging

We identify four types of benefits of gamified packaging: functional, hedonic, social, and educational. Table 2 summarizes the findings by showing 1) sources contributing to the benefits, 2) ideas for game design elements contributing to the benefits, 3) ideas for potential types of applications, and 4) ideas for requirements for plausible gamified mobile applications to engage consumers with the brand.

PLEASE INSERT TABLE 2 HERE

4.1.1. Functional benefits

The functional benefits of gamified packaging emerge from how it can contribute to an *efficient shopping experience, make shopping effortless and faster, and facilitate access to product information and use*. In this regard, grocery stores were not perceived as places for having fun, but rather as spaces where dull and mundane tasks are performed. As many participants wished for *easily accessible and personalized* product information, they shared ideas on how they would appreciate information that fits their diet (e.g., allergies, low-fat,

low-carb), values, and lifestyles (e.g., is the product organic, local, or domestic), or notifications about products within a specific price-range preset by the consumer.

Participants showed interest in gamified solutions that employ gamified components like “traffic lights” visualizing the product information or price-range fit, or mechanics such as goals to pursue by collecting points (e.g., Teotónio & Reis, 2018; Werbach & Hunter, 2012, 2015). Gamified packaging and mobile devices would facilitate and speed up access to desired information. Participants narrated how product information on packaging is sometimes unreadable due to tiny fonts; gamified packaging could solve this problem. One participant suggested a mobile app that would scan the brand package and then provide information:

“It would be nice to have an app that could scan a product barcode and provide you with detailed information about it, including its origins. You could also choose what ingredients and countries-of-origin you’d like to avoid. This would make it easy to see whether a product belongs in your shopping basket or not.” [Female, adult].

Participants discussed applications that would show product-related recipes based on personalized diet guides. They also mentioned gamified packaging and mobile applications that would make shopping more effortless and efficient, with mechanics enabling them to save time and money (Werbach & Hunter, 2012, 2015). For that, participants proposed an application that would function as a grocery store navigator, helping consumers find products and particular brands. This navigation could be based on a predefined shopping list. Similarly, such an application could help the consumer to find items that are on sale or product novelties. Furthermore, recipes and a related shopping list could appear immediately on the mobile application as one walks by packaging, as stated in the next quote:

“When the app is running, it could tell you about smoothie recipes over your headphones while you are at the curd section and maybe email you a shopping list. So

if you go into the store without premade plans you could get some tips when you walk by products and you'd have instant access to a list (and recipe), so you'd forget nothing." [Female, young middle-aged]

In essence, the personalized advantages should be accessible immediately, and the mobile application should be easy to use and free of charge, highlighting the possibilities entwined with (mobile) technology itself (Hofacker et al., 2016).

4.1.2. Hedonic benefits

Hedonic benefits (Kuo & Feng, 2013) came from *fun and enjoyment created by playing experiences, aesthetic pleasure, and competitive spirit*. Participants highlighted the *playfulness and playing experiences* that gamified packaging provides. To illustrate, many were intrigued about testing gamified ways to discover new recipes or product novelties. For example, when the user passes an item, product offers could appear on the mobile application; these would have to be personalized, as one participant explains:

"I'd like my phone to provide me with the kind of offers that interest me. It would have to be based on profiling, because I don't want to be offered, say, baking products, as I never bake. The phone could offer new products that are compatible with my profile, e.g., a new protein bar or a low-carb quark." [Male, middle-aged]

The participants emphasized that they would like to play such games or participate in gamified campaigns for products or brands they normally use or would like to use. To enable a *competitive experience* and foster achievement motivation (Xi & Hamari, 2019), it is necessary to create appropriate dynamics (Werbach & Hunter, 2012, 2015) to respond to participants' willingness to share their shopping history and preferences with other in-store customers.

Similarly, participants appreciated fun and enjoyable gamified packages that provide *aesthetic pleasure* (Hofacker et al., 2016), such as by adding beauty to social situations. For instance, one participant described her ideal package material: “[it] could be made out of glass, and be beautiful in order to bring nice atmosphere...” [Female, middle-aged]. Many liked the idea that gamified packaging could later be used for other purposes; for instance, a mother states that: “yoghurt packages such as Frozen and Star Wars have fun pictures on them, and when you wash them, children get nice cups to play with!” [Female, young middle-aged].

Participants reported that they are stimulated by game experiences and enjoy all sorts of *competitive activities*. In terms of hedonic benefits, they pointed out a set of technical and game-related requirements relating to technology (Hofacker et al., 2016). For example, participants stressed that if they have a favorite game genre, they might be reluctant to try out other types of games (e.g., word puzzles for shooter enthusiasts). Thus, at best a game feels attractive – familiar, yet novel enough to spark curiosity. Some stated that they would be more interested if the gamified package would have a game mechanical (Werbach & Hunter, 2012, 2015) tie-in with a popular game brand such as HayDay. Also, the degree of difficulty should be adequate, as many wished for mechanics such as goals to beat or story-like elements such as a plot to follow (Hofacer et al., 2016; Werbach & Hunter, 2012, 2015). However, the game should still be playable and experiential in a short amount of time (e.g., during shopping).

4.1.3. Social benefits

Gamified packaging can also provide benefits by integrating consumers with others, particularly by creating *social benefits* (Jang et al., 2018; Kuo & Feng, 2013) among family members fostered by social-related motivations (Xi & Hamari, 2019). Gamified brand

packaging with mobile applications aimed at children was suggested as a plausible way to make a shopping experience less painful. Such a game could involve components like collecting points or following stories (Hofacer et al., 2016; Werbach & Hunter, 2012, 2015). The participants imagined figure spotting games, such as Pokémon Go-like figures hidden on brand packages in the store's aisles, as illustrated in the following quote:

“There could be hidden orcs on the shelves and kids could spot them while we’re picking groceries. They would be more enthusiastic about going shopping :)”

[Female, adult]

Participants stressed that such applications could also engage teens in family shopping, as today's teens are intrigued by gamified products in general. Similarly, some were interested in playing as a family; for instance, participants suggested health knowledge competition games for families, as stated by one of the participants:

“You could have a family competition about who ate the healthiest snack. Especially children and young people might be encouraged to eat healthier.” [Female, young middle-aged]

A game could provide educational information about healthy food while identifying the healthiest eater in the family. A game could involve game mechanics like milestone achievements (Hofacer et al., 2016; Werbach & Hunter, 2012, 2015). In essence, gamified packaging would provide social benefits if the application is perceived as captivating, experiential, and educational.

4.1.4. Educational benefits

Relating to epistemic (Jang et al., 2018) and learning benefits (Kuo & Feng, 2013), participants were intrigued about gamified packages that would *educate them about health, healthy and organic eating, and sustainable and no-waste behavior*. Participants stated that

taking care of health demands great effort, and thus gamified packaging could facilitate adopting a healthier lifestyle by detecting novel ways to use familiar brands or discovering healthier new product options. Using gamified components such as following progress in healthy living with pillars, points, or rankings would be helpful (Werbach & Hunter, 2012, 2015). Such solutions could help consumers to stick to a healthy lifestyle, both when it comes to eating and exercising. One idea was to count calories while walking in the grocery store:

“Could you somehow combine calorie calculation with the game? The game would measure the distance between the tasks and you could input your food diary or calories of the foods you’ve eaten.” [Female, adult]

The participants stressed that precise product information is increasingly important because various food restrictions and allergies are common. When trying to maintain a healthy lifestyle, many reported being disappointed by misleading and vague packaging information, for example a product claiming to be “high in protein,” although the adjacent brand contains more protein. Gamified packaging could make accessing the correct information easier and more fun. Educational benefits were in fact intertwined with hedonic and social benefits, as highlighted by a participant:

“A snack could be evaluated in terms of healthiness. After taking a photo of the product, you’d immediately see if the evaluation was correct. The application would have different difficulty levels based on your knowledge: beginner, knowledgeable, professional and master. There could be a family version where family members would compare their knowledge. The shopkeeper could then randomly select a master once a month and reward them with a healthy snack.” [Female, middle-aged]

Participants also wished for gamified packaging and applications that would educate them about the environmental aspects of the product: carbon footprint, country-of-origin, locality, organic or not. This should be accessed easily, potentially as a shared game:

“Also, ‘spot the local/domestic food’ could be a good game. At least around here the stores lack domestic options ... no pulled oats, no Moomin diapers, no Linna shampoo, or local greenhouse cucumbers ... I’d eagerly buy more domestic and even locally produced [food] but they cannot be found in our stores or they disappear among all the other products because they aren’t properly marked.” [Female, adult]

Similarly, gamified packaging could educate about ecological consumption, such as how to avoid plastic or other harmful package materials, and how to recycle the brand package after use. However, gamified packaging should not encourage excess consumption and thereby increase waste. Instead, different gamified mechanics and components could be helpful in increasing sustainable behaviors, like pillars or red tags on the packages that warn the food is about to expire (Werbach & Hunter, 2012, 2015). Thus, gamified packaging has great potential to educate consumers about various health- and sustainability-related matters in an acceptable and comprehensible way.

4.2. Typologizing consumer brand engagement and consumer benefits through gamified packaging

Based on the identified benefits, we offer a multidimensional typology concerning the interplay between consumer brand engagement and consumer benefits within the context of gamified packaging. In this, we elaborate on our findings on consumer benefits by deliberating on how each of the detected benefits of gamified packaging are connected to the dimensions of brand engagement: cognitive, emotional, and behavioral (Hollebeek, 2011a,b; Hollebeek et al., 2014, Hollebeek et al., 2019). These findings are summarized in Table 3.

PLEASE INSERT TABLE 3 HERE

Aligned with the cognitive dimension of consumer brand engagement (Hollebeek et al., 2014), the findings reveal how the gamified package may stimulate the consumer's brand-related thinking through the four benefits. This may happen, for instance, when the gamified elements enable easier access to brand information or provide means to use products in novel ways (e.g., by providing new recipes) (functional and hedonic benefits). This finding resembles Müller-Stewens et al.'s (2017) results that gamified, vivid information presentation influences consumers' product adoption by boosting consumer playfulness. Further, as brands become a playful part of the family's shopping experience, they may become "top of mind brands" that the family talks about (hedonic and social benefits). The brand may also act as an intermediary for achieving and pondering life-goals, such as creating social connections between family members (social benefit) and encouraging ecological or health-oriented consumption (educational benefits). This relates to Nicholson's (2015) argument on meaningful gamification, which enables consumers to accomplish deeper meanings through gamified activity. Yet, especially with regards to functional benefits, consumers actually wanted to diminish the cognitive effort required, for instance, to discover products in the store or find out information about the product contents or manufacturing processes. Thus, easing the cognitive effort involved in the shopping experience appears as a central means whereby the gamified package can create consumer brand engagement.

The wish for easiness relates to the second, emotional, dimension of consumer brand engagement (Hollebeek et al., 2014), as making quotidian tasks easier generates positive emotions. Similar to prior findings on gamification in general (e.g., Huotari & Hamari, 2012; Robson et al., 2014), gamified packaging appears to possess great possibilities to create positive emotions in consumers through the four benefits. Gamification enables to provide variation in experience, which is found to lead to emotional attachment (Kumar et al., 2019). The positive emotions emerging through gamified packaging resemble game-playing

motivations, such as achievement and social (e.g., Luomala et al., 2017; Yee, 2006; Xi & Hamari, 2019). Indeed, the possibility to express competitiveness and playfulness seemed to be attached to all types of benefits. Functional benefits yielded feelings such as relief, while fun and engagement were emphasized in hedonic and educational benefits. The social-related motivation emerged in relation to not only social but also educational benefits, in which cases the gamified package was seen as a way to connect with family members and peer customers through a joint brand-related game-playing experience.

The third, behavioral, consumer brand engagement dimension offers possibly the greatest potentials for gamified packaging, as the gamification elements attached to the brand packages can increase consumers' behavioral interaction with the brand. Huotari and Hamari (2012) describe gamification as a co-created process in which the producer only creates frameworks, rules, and contents for the game, but the consumer-players actually *play* the game. In the retail-store setting, this behavioral dimension takes shape both as moving around the store aisles as well as touching and interacting with brand packages and one's mobile device. In regard to functional benefits, gamified packaging provides means for an easier and more fluent shopping experience, whereas the other three types of benefits highlight the potential of gamified packaging to engage consumers in more experiential, fun, and social playing, such as finding game characters around the store, or gathering badges by competing on the best knowledge of sustainable brand choices. While most of the behavior-inducing elements in gamified packages are based on short-term rewards, such as achieving levels, badges, or points, educational benefits open up possibilities for meaningful gamification that may lead to long-term changes (Nicholson, 2015). For brand management, this creates opportunities for engaging consumers not only through entertainment, but also through deeper meaning-making attached to personal life-goals.

6. Conclusions

The current study explores, from the consumer perspective, how benefits stemming from gamification and consumer brand engagement are interconnected in the context of food packaging. The findings highlight four benefits that gamified packaging is able to generate for the consumer (functional, hedonic, social, and educational), which are further linked to the dimensions of consumer brand engagement (cognitive, emotional, and behavioral) (Hollebeek et al., 2014; Hollebeek et al., 2019).

The research yields two theoretical contributions. First, we bring forward a fresh multidimensional typology highlighting how consumer benefits emanating from gamified packaging are interconnected with consumer engagement with the brand. The four detected consumer benefits are elaborated in terms of their game elements and related mobile application requirements. This discussion may be utilized as a tool for both identifying unanswered research questions and successfully managing and innovating gamified packages and other gamified marketing applications. The findings shed light on the potential of packaging and particularly gamified packaging to induce consumer interaction with the brand in a way that activates consumers cognitively, emotionally, and behaviorally. Therefore, the findings of the current study provide a tangible toolkit. Consumer engagement does not need to be solely an outcome of gamification; instead, through various forms of interaction with the brand, gamification can boost the iterative nature of consumer brand engagement, as positive interactions are interlinked with future brand-related actions (Hollebeek et al., 2019).

Secondly, the consumer-oriented perspective of the present study brings forward a novel understanding for consumer-driven innovations (von Hippel, 2009) for gamification that highlights how it fits in their mundane lives. As the study is entwined with daily routines, such as doing grocery shopping, the benefits consumers expect from the gamified packaging do not relate to self-esteem or social status, as emphasized in cases of gamified applications or online interaction (Jang et al., 2018; Kuo & Feng, 2013). Instead, the practical side of

everyday life is highlighted and functional and educational benefits appear as their own categories, not simply clustered into one that implies learning benefits (cf., Jang et al., 2018; Kuo & Feng, 2013). Therefore, our research highlights the importance of democratizing innovation (von Hippel, 2009) and suggest taking into account the context-specificity of gamification in particular when aiming at meaningful gamification (Nicholson, 2015).

The consumer-driven ideas for innovating future applications of gamification also provide key ideas for the managerial implications. In this regard, our findings stress the key elements of gamified packages and provide ideas for what type of gamification elements to apply when developing gamified packages for brands. The findings also highlight types and technological requirements of mobile applications connected to gamified packaging. Functional benefits in a package can manifest themselves through elements that facilitate the shopping experience, for instance by making the product information effortlessly accessible or products easier to find in grocery stores. Interestingly, consumers were rather willing to share their personal preferences and shopping history in order to get personalized offers and a smooth gamification experience. Hedonic benefits can be achieved by, for instance, providing consumers with narrative featurettes to follow. This storytelling element can be further enhanced by using the tangible aspects of the package, enabling the consumer to transform the package's shape to find something new. The social benefits consisted of strengthening family ties and easing the shopping experience via milestones and achievements that can create social benefits, and competition and cooperation possibilities that create interaction for the whole family or circle of friends. Educational benefits can be generated by sharing information with consumers, and allowing them to compete on their expertise on, say, healthy eating. Generally, if gamified packaging apps are able to deliver benefits that offer hope for consumers in their goal pursuits (Eisingerich et al., 2019), then they more readily accept them as a meaningful part of their lives (Nicholson, 2015).

The study findings can be viewed against effective gamified mobile marketing (Hofacker et al., 2016), and suggest that it is worthwhile to provide a mixture of benefits. When it comes to extrinsic reward mechanics (e.g., monetary advantages) they may foster cognitive brand engagement and functional benefits, and intrinsic reward mechanics (e.g., reputational benefits) may catalyze emotional brand engagement and both hedonic and social benefits (Hofacker et al., 2016). Taken together, the multitude of benefits highlight that contemporary brand packaging goes beyond functional and communicative means (e.g., Niemelä-Nyrhinen & Uusitalo, 2013). However, future examinations should dig deeper into the intersections of different benefits provided by gamified brand packages, and how the variety of benefits could be enhanced through a suitable set of platform characteristics. Our findings show that various benefits are highly intertwined; for instance, consumers often wished that the gamified brand package would make their shopping experience easier (functional benefit), but in a fun (hedonic benefit) and educational way. Inducing “true” brand love in consumers seems to be possible only as a consequence of multidimensional values or benefit experiences (Hsu and Chen, 2018).

Furthermore, stemming from consumers’ mundane consumption situations (Syrjälä et al., 2017), the study suggests that it is not only a single brand that contributes with the benefits, but instead benefits emerge from a network of commercial actors (Tax et al., 2013) that may make consumers’ value journey smoother (functional benefit), fun (hedonic benefit), socially engaging, and educational. In a similar vein, the study shows that brand engagement created through gamification may appear through a network of actors that intertwine to create a multitude of benefits at once. This, however, needs deeper focus in future studies.

Additionally, our study qualifies as a theory-building exploration, confirming the ability of gamified packages to induce brand engagement in consumers’ everyday lives.

However, although the context-specificity of the current exploration provides understanding on consumers' daily deliberations, it also calls for further research. In particular, as the current study focuses on food packages and mundane activities, the functional and utilitarian benefits were highly relevant. As recent research shows, consumers may be less likely to form brand engagement to functional brands compared to more emotionally laden brands (Fernandes & Moreira, 2019), and therefore future research on different contexts is needed to explore especially the hedonic and social benefits these types of brands are capable of inducing.

Another shortcoming of our research concerns the lack of attention given to the role of consumer variation in shaping how gamified packages transform into consumer brand engagement and benefits. For example, consumers' general attitudes toward gamification and resistance to it as a "rule-structured goal-oriented sociotechnical management system" (Dymek, 2018) that actually undermines genuine playfulness can moderate brand engagement and consumer benefits. Also, the consumer panel from which our participants were recruited generally focuses on food consumption, and therefore the participants might have an above-average interest in food issues. Similarly, the current study did not focus on variation in other consumer traits and motivations, such as previous gaming experience and socio-demographics, which should be explored more in the future. To illustrate, as female consumers were overemphasized in the current data, future studies could investigate whether gamification could be used to specifically engage male consumers.

References

Aday, M. S. and Yener, U. (2015). Assessing consumers' adoption of active and intelligent packaging. *British Food Journal*, 117(1):157-177.

- Andreini, D., Pedeliento, G., Zarantonello, L., and Solerio, C. (2018). A renaissance of brand experience: Advancing the concept through a multiperspective analysis. *Journal of Business Research*, 91:123-133.
- Anttila, T., and Oinas, T. (2018). 24/7 Society - The new timing of work? In Tammelin M., editor, *Family, Work and Well-Being. Springer Briefs in Well-Being and Quality of Life Research*, pages 63-76. Springer, Cham.
- Ares, G., Gimenez, A., and Deliza, R. (2010). The influence of the three non-sensory on consumer choice of functional yogurts over regular ones. *Food Quality and Preference*, 21: 361-367.
- Berger, A., Schlager, T., Sprott, D. E., and Herrmann, A. (2018). Gamified interactions: whether, when, and how games facilitate self-brand connections. *Journal of the Academy of Marketing Science*, 46(4): 652-673.
- Brodie, R. J., Hollebeek, L. D., Ilic, A., and Juric, B. (2011). Customer engagement: conceptual domain, foundation propositions and research implications. *Journal of Service Research*, 14(3): 252-271.
- Deterding, S., Dixon, D., Khaled, R., and Nacke, L. (2011). From game design elements to gamefulness: defining gamification. In *Proceedings of the 15th international academic MindTrek conference: Envisioning future media environments*, pages 9-15. New York. ACM.
- Dymek, M. (2018). Expanding the magic circle – gamification as a marketplace icon. *Consumption Markets & Culture*, 21(6): 590-602.
- Eisingerich, A. B., Marchand, A., Fritze, M. P., and Dong, L. (2019). Hook vs. hope: How to enhance customer engagement through gamification. *International Journal of Research in Marketing*, 36(2): 200-215.

- Eriksson, P., and Kovalainen, A. (2016). *Qualitative methods in business research: A practical guide to social research*. Sage.
- Fernandes, T., and Moreira, M. (2019). Consumer brand engagement, satisfaction and brand loyalty: a comparative study between functional and emotional brand relationships. *Journal of Product & Brand Management*, 28(2): 274-286.
- Fernqvist, F., Olsson, A., and Spendrup, S. (2015). What's in it for me? food packaging and consumer responses, a focus group study. *British Food Journal*, 117(3): 1122-1135.
- Gaiser, T. J. (2008). Online focus groups. In Fielding, N. G., Lee, R. M., and Blank, G, editors, *The SAGE handbook of online research methods*, pages 290-306. Sage.
- Gracia, A., and Albisu, L.M. (2001). Food consumption in the European Union: Main determinants and country differences. *Agribusiness*, 17: 469–488.
- Graffigna G. and Gambetti R. C. (2015). Grounding consumer-brand engagement: a field-driven conceptualization. *International Journal of Market Research*, 57(4): 605-630.
- Hakola, J. (2013). Customer perceptions of the value of new packaging technologies. *Journal of Business & Industrial Marketing*, 28(8): 649-659.
- Hamari, J., and Koivisto, J. (2013, June). Social Motivations to Use Gamification: An Empirical Study of Gamifying Exercise. In *ECIS* (Vol. 105).
- Hamari, J., Koivisto, J., and Sarsa, H. (2014). Does Gamification Work?-A Literature Review of Empirical Studies on Gamification. *HICSS*, 14 (2014): 3025-3034.
- Hamari, J. Parvinen, P., Gustafsson, A., and Wunderlich, N. (forthcoming). Special issue on “Theoretical Perspectives and Applications of Gamification in Business Contexts”. *Journal of Business Research*.

- Harwood, T., and Garry, T. (2015). An investigation into gamification as a customer engagement experience environment. *Journal of Services Marketing*, 29(6/7): 533-546.
- Hesse-Biber, S., and Griffin, A. J. (2013). Internet-mediated technologies and mixed methods research: Problems and prospects. *Journal of Mixed Methods Research*, 7(1): 43-61.
- Hines, T. (2000). An evaluation of two qualitative methods (focus group interviews and cognitive maps) for conducting research into entrepreneurial decision making. *Qualitative market research: An international journal*, 3(1): 7-16.
- Hofacker, C. F., De Ruyter, K., Lurie, N. H., Manchanda, P., and Donaldson, J. (2016). Gamification and mobile marketing effectiveness. *Journal of Interactive Marketing*, 34: 25-36.
- Hollebeek, L. D. (2011a). Demystifying customer brand engagement: Exploring the loyalty nexus, *Journal of Marketing Management*, 27(7-8): 785-807
- Hollebeek, L. D. (2011b). Exploring customer brand engagement: definition and themes. *Journal of Strategic Marketing*, 19(7): 555-573.
- Hollebeek, L. D., Glynn, M. S., and Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, 28: 149-165.
- Hollebeek, L. D., Srivastava, R. K., and Chen, T. (2019). SD logic–informed customer engagement: integrative framework, revised fundamental propositions, and application to CRM. *Journal of the Academy of Marketing Science*, 47(1): 161-185.
- Holm, L., Lund, T. B., and Niva, M. (2015). Eating practices and diet quality: A population study of four Nordic countries. *European Journal of Clinical Nutrition*, 69: 791–798.
- Hooley, G. J. and Saunders. J. (1993). *Competitive Positioning: The Key to Marketing Strategy*. New York, NY: Prentice Hall.

- Hsu, C.-L., and Chen, M.-C. (2018). How gamification marketing activities motivate desirable consumer behaviors: Focusing on the role of brand love. *Computers in Human Behavior*, 88: 121-133.
- Huotari, K., and Hamari, J. (2012). Defining gamification: A service marketing perspective. In *Proceeding of the 16th International Academic MindTrek Conference*, MindTrek '12, pages 17–22, New York. ACM.
- Huotari, K., and Hamari, J. (2017). A definition for gamification: anchoring gamification in the service marketing literature. *Electronic Markets*, 27(1): 21–31.
- Husić-Mehmedovića, M., Omeragić, I., Batagelj, Z., and Kolar, T. (2017). Seeing is not necessarily liking: Advancing research on package design with eye-tracking. *Journal of Business Research*, 80: 145-154.
- Hwang, J., and Choi, L. (2019, in press.). Having fun while receiving rewards?: Exploration of gamification in loyalty programs for consumer loyalty. *Journal of Business Research*. DOI:/10.1016/j.jbusres.2019.01.031
- Jaakkola, E., and Alexander, M. (2014). The role of customer engagement behavior in value co-creation: a service system perspective. *Journal of service research*, 17(3): 247-261.
- Jang, S., Kitchen, P. J., and Kim, J. (2018). The effects of gamified customer benefits and characteristics on behavioral engagement and purchase: Evidence from mobile exercise application uses. *Journal of Business Research*, 92: 250-259.
- Kauppinen-Räsänen, H. (2014). Strategic use of colour in brand packaging. *Packaging Technology and Science*, 27(8): 663-676.
- Kauppinen-Räsänen, H. and Jauffret, M.-N. (2018). Using colour semiotics to explore colour meanings. *Qualitative Market Research: An International Journal*, 21(1): 101-117.
- Kauppinen-Räsänen, H. and Uusitalo, O. (2015). Brand packaging as a visual cue in a service environment. In Gummerus, J. and von Koskull, C., editors, *The Nordic*

School – Alternative Perspectives on Marketing and Service Management, pages 379–393. Hanken School of Economics.

Kauppinen-Räsänen, H., van der Merwe, D., and Bosman, M. (2020, in press). Global OTC pharmaceutical packaging with a local touch. *International Journal of Retail & Distribution Management*.

Krishna, A., Cian, L., and Aydinoglu, N. Z. (2017). Sensory aspects of package design. *Journal of Retailing*, 93(1): 43-54.

Kumar, V., Rajan, B., Gupta, S., and Dalla Pozza, I. (2019). Customer engagement in service. *Journal of the Academy of Marketing Science*, 47(1): 138-160.

Kuo, Y. F., and Feng, L. H. (2013). Relationships among community interaction characteristics, perceived benefits, community commitment, and oppositional brand loyalty in online brand communities. *International Journal of Information Management*, 33(6): 948-962.

Kuvykaite, R., Dovaliene, A., and Navickiene, L. (2009). Impact of package elements on consumer's purchase decision. *Economics and Management*, 14(1): 441-447.

Löfgren, M. (2005). Winning at the first and second moments of truth: an exploratory study. *Managing Service Quality: An International Journal*, 15(1): 102-115.

Lorenzini, G. C., Mostaghel, R., and Hellström, D. (2018). Drivers of pharmaceutical packaging innovation: A customer-supplier relationship case study. *Journal of Business Research*, 88: 363-370.

Lounis, S., Neratzouli, X., and Pramataris, K. (2013). Can gamification increase consumer engagement? A qualitative approach on a green case. In *Conference on e-Business, e-Services and e-Society*, pages 200-212. Springer.

Lucassen, G., and Jansen, S. (2014). Gamification in Consumer Marketing-Future or Fallacy?. *Procedia-Social and Behavioral Sciences*, 148: 194-202.

- Luomala, H. T., Sihvonen, J., Syrjälä, H., Mäkilä, T., Könnölä, K., Liukkonen, T., Lundén, S., and Sandell, M. (2017). Linking digital game-playing motivations to food consumption. In *Proceedings of the 1st International GamiFIN Conference*. Pages 111-119.
- Machado, J. C., Vacas-de-Carvalho, L., Azar, S. L., André, A. R., and dos Santos, B. P. (2019). Brand gender and consumer-based brand equity on Facebook: The mediating role of consumer-brand engagement and brand love. *Journal of Business Research*, 96: 376-385.
- Mulcahy, R., Russell-Bennett, R., and Iacobucci, D. (2018, in press). Designing gamified apps for sustainable consumption: A field study. *Journal of Business Research*. DOI:/10.1016/j.jbusres.2018.10.026
- Mullins, J. K., and Sabherwal, R. (2018, in press). Gamification: A cognitive-emotional view. *Journal of Business Research*. DOI:/10.1016/j.jbusres.2018.09.023
- Müller-Stewens, J., Schlager, T., Häubl, G., and Herrmann, A. (2017). Gamified information presentation and consumer adoption of product innovations. *Journal of Marketing*, 81(2): 8-24.
- Nicholson, S. (2015). A RECIPE for meaningful gamification. In Reiners, T. and Wood, L. C., editors, *Gamification in Education and Business*, pages 1–20. Springer.
- Niemelä-Nyrhinen, J. and Uusitalo, O. (2013). Identifying potential sources of value in a packaging value chain. *Journal of Business & Industrial Marketing*, 28(2): 76-85.
- Nilsson, E., Gärling, T., Marell, A., and Nordvall, A. C. (2015). Who shops groceries where and how? The relationship between choice of store format and type of grocery shopping. *The International Review of Retail, Distribution and Consumer Research*, 25(1): 1-19.

- Oppong-Tawiah, D., Webster, J., Staples, S., Cameron, A. F., de Guinea, A. O., and Hung, T. Y. (2018, in press). Developing a gamified mobile application to encourage sustainable energy use in the office. *Journal of Business Research*. DOI: doi.org/10.1016/j.jbusres.2018.10.051
- Paasovaara, R., Luomala, H. T., Pohjanheimo, T., and Sandell, M. (2012). Understanding consumers' brand-induced food taste perception: A comparison of 'brand familiarity'– and 'consumer value–brand symbolism (in)congruity'–accounts. *Journal of Consumer Behaviour*, 11(1): 11-20.
- Ramaswamy, V., and Ozcan, K. (2018). What is co-creation? An interactional creation framework and its implications for value creation. *Journal of Business Research*, 84: 196-205
- Robson, K., Plangger, K., Kietzmann, J., McCarthy, I., and Pitt, L. (2014). Understanding gamification of consumer experiences. In Cotte, J. and Wood, S., editors, *North-American Advances in Consumer Research*, volume 42, pages 352–356. Association for Consumer Research.
- Rundh, B. (2016). The role of packaging within marketing and value creation. *British Food Journal*, 118(10):2491-2511.
- Saunders, M., Lewis, P., and Thornhill, A. (2008). *Research Methods for Students*. Pearson Education.
- Schell, J. (2014). *The Art of Game Design: A book of lenses*. AK Peters/CRC Press.
- Sheth, J. N., Newman, B. I., and Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2): 159-170.
- Solja, E., Liljander, V., and Söderlund, M. (2018). Short brand stories on packaging: An examination of consumer responses. *Psychology & Marketing*, 35(4): 294-306.

- Syrjälä, H., Luomala, H. T., and Autio, M. (2017). Fluidity of places in everyday food consumption: Introducing snackscape. *International journal of consumer studies*, 41(6); 761-768.
- Tax, S. S., McCutcheon, D., and Wilkinson, I. F. (2013). The service delivery network (sdn): A customer-centric perspective of the customer journey. *Journal of Service Research*, 16(4): 454-470.
- Teotónio, N., and Reis, J. L. (2018). The gamification systems application elements in the marketing perspective. In Rocha, Á., Adeli, H., Reis, L. P., and Costanzo, S., editors, *Trends and Advances in Information Systems and Technologies*, pages 77–87. Springer.
- Vivek, S. D., Beatty, S. E., and Morgan, R.M. (2012). Customer engagement: exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, 20(2): 127-145.
- Von Hippel, E. (2009). Democratizing innovation: the evolving phenomenon of user innovation. *International Journal of Innovation Science*, 1(1): 29-40.
- Werbach, K. (2014). (Re) defining gamification: A process approach. In *International conference on persuasive technology* (pp. 266-272). Springer, Cham.
- Werbach, K., and Hunter, D. (2012). *For the Win: How Game Thinking Can Revolutionize Your Business* Wharton Digital Press, Philadelphia.
- Werbach, K., and Hunter, D. (2015). *The gamification toolkit: dynamics, mechanics, and components for the win*. Wharton Digital Press, Philadelphia.
- Wolf, T., Weiger, W. H., and Hammerschmidt, M. (2019, in press). Experiences that matter? The motivational experiences and business outcomes of gamified services. *Journal of Business Research*. DOI:/10.1016/j.jbusres.2018.12.058

- Wong, H.Y., and Merrilees, B. (2015). An empirical study of the antecedents and consequences of brand engagement. *Marketing Intelligence & Planning*, 33(4): 575-591.
- Xi, N., and Hamari, J. (2019). The relationship between gamification, brand engagement and brand equity. In *Proceedings of the 52nd Hawaii International Conference on System Sciences*.
- Yee, N. (2006). Motivations for play in online games. *CyberPsychology & Behavior*, 9(6): 772-775.
- Zichermann, G. and Cunningham, C. (2011). *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps*. O'Reilly Media, Inc., 1st edition.

Figure 1

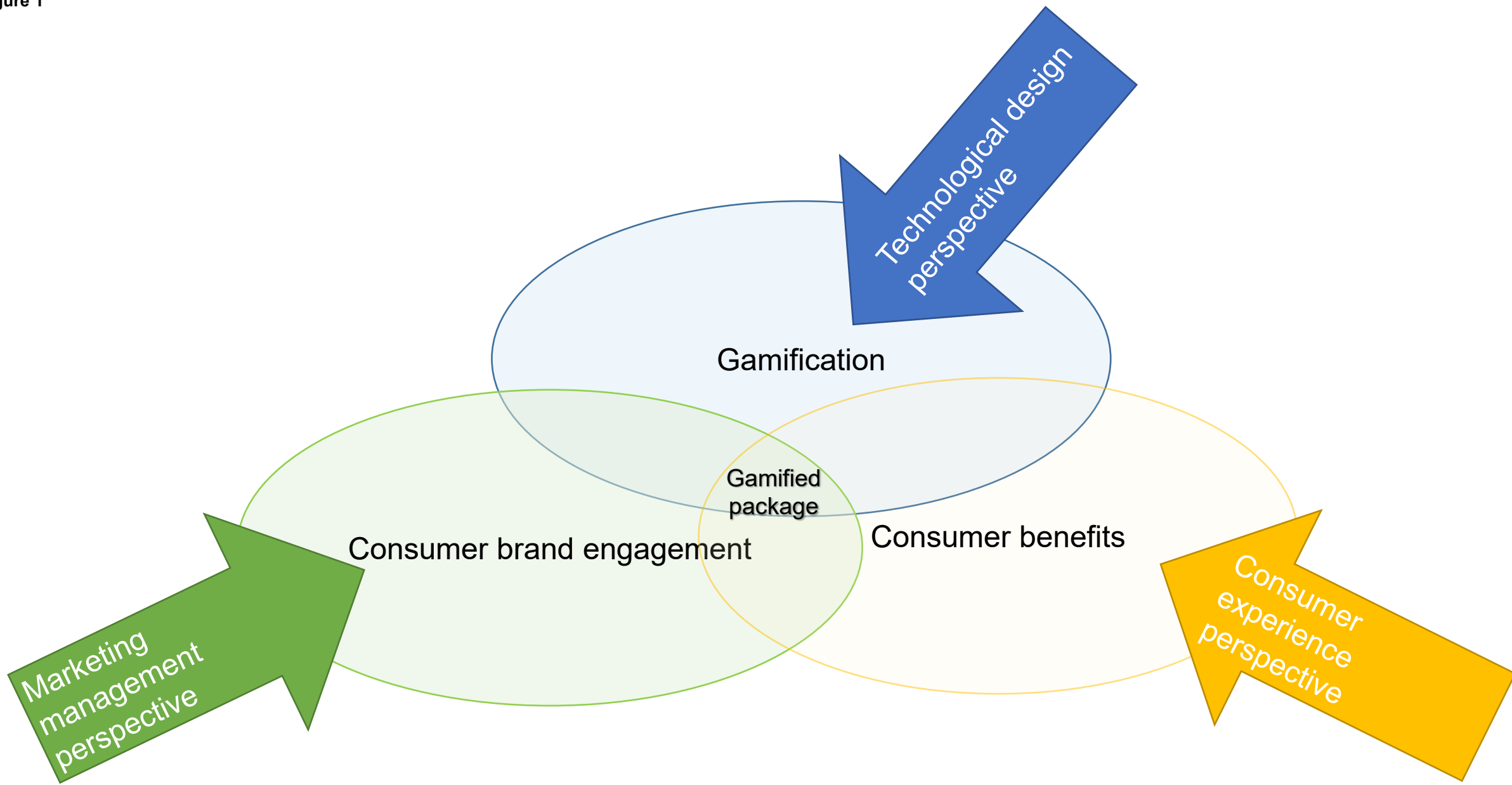


Figure 1. Integrative framework on gamified package.

Table 1

	Focus on interconnection between theoretical constructs			
Discussion threads in the data generation	Consumer brand engagement and consumer benefits	Gamification and consumer brand engagement	Consumer benefits and gamification	Consumer brand engagement, gamification and consumer benefits
1) Good and bad packaging characteristics in everyday food consumption	X			
2) Perceived benefits of favorite packages	X			
3) Mobile technology usage in retail setting		X		
4) Ability of gamification and game design elements to offer benefits in retail settings			X	
5-7) Co-creation of location-based treasure hunting game				X
8) Opinions and feelings about gamified marketing campaigns				X

Table 1. Themes and ideas emanating from theoretical constructs relating to empirical conduct.

Table 2

Benefits	Examples of the benefits	Game design elements*	Types of applications	Mobile application requirements
Functional	<ul style="list-style-type: none"> · Efficient shopping · Effortless shopping experience · Easy access to personalized product information · Easy access to ideas of product use 	<ul style="list-style-type: none"> · Feedback to access relevant information (M) with, e.g., traffic lights (C) · Goals or challenges to pursue (M) by, e.g., collecting points through barcodes (C) 	<ul style="list-style-type: none"> · Personalized diet guide · Personalized recipe producer · Personalized grocery store navigator 	<ul style="list-style-type: none"> · Personalized based on own diets and/or taste · Easy to use and comprehend · Free of charge
Hedonic	<ul style="list-style-type: none"> · Fun, enjoyment · Playing experience · Aesthetic pleasure · Competitive experience 	<ul style="list-style-type: none"> · Reminders, virtual goods, avatars to trigger gameplay or application usage (D) · Packages' properties (D) with, e.g., game avatars or transforming packages (M) · Goals, challenges (M) 	<ul style="list-style-type: none"> · Adver(games) · Existing games (or tie-ins to them) · Personalized offering producer 	<ul style="list-style-type: none"> · Personalized based on own diets and/or taste · Familiar game types (e.g., puzzles, shooter games) · Short games · Competitive games
Social	<ul style="list-style-type: none"> · Engaging family members · Entertaining children to ease shopping 	<ul style="list-style-type: none"> · Teams (D) using groups (of families) (M) · Competitions (M) with, e.g., points/rewards, stories, and non-virtual goods (for nicer shopping experience) (C) 	<ul style="list-style-type: none"> · Figure spotting game · Family health competition game 	<ul style="list-style-type: none"> · Captivating and attracts interest · Competitive · Connecting and informative
Educational	<ul style="list-style-type: none"> · Health knowledge · Knowledge on healthy and organic eating · Knowledge on sustainable and no-waste behavior 	<ul style="list-style-type: none"> · Feedback (about health and sustainability information) (M) · Progress (M) by points and levels (C) 	<ul style="list-style-type: none"> · Health ingredients reminder · Healthy lifestyle keeper · Food waste alert · Recycling informer 	<ul style="list-style-type: none"> · Personalized based on diet and/or taste · Informative

* In the column “game design elements” (D) refers to dynamics, (M) to mechanics, and (C) to components pointing to different levels of game design elements (e.g., Teotónio & Reis, 2018; Werbach & Hunter, 2012, 2015).

Table 2. Sources of and means to evoke benefits of gamified packaging

Table 3

Benefits of the gamified package	Consumer brand engagement			
		Cognitive dimension	Emotional dimension	Behavioral dimension
	Functional	Thought processing required to carry out shopping, to get product information in gamified packages	Relief and other positive emotions caused by making shopping easier via gamified packages	Moving around the store due to the easy access to information, touching the gamified packages
	Hedonic	Pondering about the experiences provided by the gamified package, e.g., usage of novelties, game-playing	Fun, enjoyment, aesthetics, pleasure, playfulness caused by the experiential aspects of the gamified package	Game-playing experiences, reacting to product offers, admiring exceptional looking and functioning gamified packages
	Social	Elaborations about how to connect with others and how to succeed in the game attached to packages while doing groceries	Felt social integration and family cohesion caused by a captivating package enabling a gaming experience that, e.g., prevents crankiness	Shared game-playing with friends and family in the aisles of the retail store, e.g., by spotting figures in the gamified packages
Educational	Cognitive processing about product contents and production, e.g., ecological and health aspects enabled by gamified packages	Joy stemming from novel, captivating and informational way of learning via gamified packages	Education coming from handling the gamified packages and walking in the aisles of the store	

Table 3. A multidimensional typology of consumer brand engagement and consumer benefits through gamified packaging.

Authors' biographies

Henna Syrjälä works as an Associate Professor at the School of Marketing and Communication, University of Vaasa, Finland. Her research interests revolve around cultural consumer and marketing research, key areas including pet-related consumption, consumption in poverty, responsible consumption, food consumption, digitalization and gamification, and theoretical discussions such as consumer identity, (non)human agency, and everyday practices.

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Harri T. Luomala is a Professor investigating consumer behavior at the School of Marketing and Communication, University of Vaasa, Finland. His main research interests concern interrelationships between values, emotions, motives and taste perceptions in food consumption and in consumer-oriented food product development; cross-cultural issues; consumer perception of products, brands and commercial environments; tailored health interventions; sustainable consumption as status signaling and gamification.

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Tuomas Mäkilä is a senior research fellow at the University of Turku, where he has researched and taught software engineering since 2004. His main research interests are on the software development methods and the applied game development techniques.

Highlights

- Gamification and consumer brand engagement are multi-dimensionally interconnected
- Gamified packaging provides functional, hedonic, social, and educational benefits
- Gamified package enable brands to interact with consumers in their everyday lives
- Food packaging enables suggesting consumer-driven innovations to gamification