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The role of brand community identification, reward and consumer brand engagement on brand loyalty in virtual gaming brand communities among third-level students.

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Abstract

Title of thesis: The role of brand community identification, reward and consumer brand engagement on brand loyalty in virtual gaming brand communities among third-level students.

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Brand loyalty and consumer brand engagement have become increasingly important as people interact more and more on the interactive web. However, despite the growing importance of brand loyalty within virtual brand communities, insights into the driving factors, motivations and outcomes remain limited, as investigated in this research. The aim of this research is to bridge the gap and investigate which aspects of virtual gaming brand communities positively affect brand loyalty amongst third-level students. Therefore, this study proposed multiple factors that significantly influence brand loyalty (brand community identification, reward and consumer brand engagement). The author chose a quantitative approach for which a questionnaire was conducted with 102 third-level students who are active members of virtual gaming brand communities. The results reveal that all constructs: brand community identification, reward and consumer brand engagement have a significant positive effect on brand loyalty, with brand community identification bearing the strongest influence. Theoretically, the findings of this study provide further insights into brand loyalty in virtual gaming community-based dynamics. Fundamentally, the findings identify the critical role of organisations and marketing practitioners to nurture virtual consumer's community identification and offer rewards to engage consumers and build long-term relationships. In summary, the findings of the study guide the brand owner to identify the resources that have a higher impact (brand community identification) and distribute the investments accordingly.

Declaration of Authorship

National College of Ireland

Research Students Declaration Form

(Thesis/Author Declaration Form)

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I, Charlotte Callaert, hereby declare that this dissertation is the end result of my own work, and that all information in this document has been obtained and presented in

accordance with academic rules and research ethics. I also declare that due acknowledgement has been given in the bibliography and have fully cited and referenced all materials and sources, be they printed, electronic or personal.

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Chapter I: Introduction

1.1 Background

The primary goal in marketing is to achieve customer loyalty. However, building that loyalty and repeating the rewards remain a challenge (Watson, et al., 2015). Given the amount of people that spend their time online, marketers are looking to invest substantially in this area. Moreover, there's a two way interaction between the brand and consumer, which contrasts with traditional media (Kaur et al. 2020). CBE in a changing, high-level interactivity environment is therefore important as it impacts brand loyalty amongst other variables like rewards and brand community identification (Kaur et. al., 2020).

In summary, digital marketing has brought new challenges and ways to generate loyalty with customers. The high degree of interactivity does not only create opportunities for consumers to respond to brand-related communication, but also to create these themselves (Kaur et al., 2020). In recent years, marketers have seen a shift from offline face-to-face conversations towards online communication channels. Specifically, customers who are engaged have actively contributed to sales increases and organisational performance, thus creating significant and positive online WOM marketing (Bijmolt et al., 2010).

VBCs are "specialized, non-geographically bound online communities based on social communications and relationships among a brand's consumers" (De Valck et al., 2009, p. 185). Accordingly, the role of VBCs becomes increasingly important as it offers an crucial setting to study brand loyalty, which is linked to consumer brand engagement (Kaur et al., 2020, Dessart et al., 2015, Brodie et al., 2013). "Given its high inherent interactivity, virtual brand communities (VBCs) have been identified as an important setting to facilitate or study consumer brand engagement" (Kaur et al., 2020, p. 2). Therefore, it has been of significant academic interest to further study the role of VBCs in engaging with consumers while developing and strengthening the consumer's relationship (Islam and Rahman, 2017, Dessart et al., 2015). Moreover, brand owners

want to identify the resources that have the highest impact on building brand loyalty and distribute the investment accordingly.

Researchers have tried to understand how virtual brand communities generate brand loyalty by ways of eWOM (Raïes et al., 2015 and Kaur et al., 2020). However, there remains little known about the driving factors and motivations of consumers as empirical research in this area is limited (Baldus et al., 2015).

1.2 Statement of the problem

Many researchers have tried to understand the importance of virtual brand communities and how they influence brand loyalty (Raïes et al., 2015 and Kaur et al., 2020). Nevertheless, there is a gap in understanding the relationship factors and motivations between generating brand loyalty in VBCs among third-level students. Research over the last few years has shifted their focus towards a wide range of services or consumer goods (Watson and Beck, 2015 and Trusov et al., 2009). Previous research shows the importance of brand community identification in generating brand loyalty (Kaur et al., 2020). Accordingly, this study defined the factors that influence brand loyalty in VBCs and investigates the user's motivations and outcomes.

Moreover, previous research has attempted to analyse the impact of VBCs on brand loyalty through the lens of social identity theory (SIT), which provides a better understanding of the role of subjective norms related to brand community identification. However, the research is narrowed by providing insights into only one specific social media platform and cohort (Kaur et al., 2020, Islam and Rahman, 2017).

Research has now shifted attention towards social media and content sharing. (Haikel-Elsabeh et al., 2019). However, there is no evidence in previous literature that attempts to study the relationship between the SIT, rewards and consumer (brand) engagement towards generating brand loyalty amongst third-level students in VBCs.

The discussion about this topic is important because it determines the consumer-based motivations and the success factors in response to the gap in research. Given the motivational nature of consumer brand engagement, the author identified the natural

brand loyalty antecedents, brand community identification and reward as key drivers in this research (Kaur et al., 2020 and Hollebeek and Chen, 2014).

Brand community identification and reward determine CBE's motivational nature (Hollebeek et al., 2014). These perspectives outline a consumer's motivation to select a particular brand and media. Accordingly this study explores the effect of consumer intrinsic brand identification and extrinsic reward motivation for their investment in virtual gaming brand communities, thus influencing brand loyalty. This provides insight with regards to the dynamics in consumer engagement in VBCs (Kaur et al., 2020, Hollebeek et al., 2019b).

This study is important, as it provides a better understanding of the direct effect of consumers' brand community identification and UGT based reward on their brand loyalty in VBC. Moreover, it analyses the role of CBE in VBCs which can be used for marketers to further facilitate online consumer relationship management strategies (Kaur et al., 2020, Islam and Rahman, 2017, Dessart et al., 2015).

1.3 Definition of terms

This section contributes to a clear definition of the terminology and abbreviations used in this research. The definition and abbreviation are presented in table 1 below.

Term	Abbreviation	Definition
Brand loyalty	BL	"Biased behavior response expressed overtime by some decision-making unit with respect to one or more alternative brands out of a set of such brands" (Jacoby and Chestnut, 1978, p. 80).
Digital Marketing	DM	"An adaptive, technology-enabled process by which firms collaborate with customers and partners to jointly create, communicate, deliver, and sustain value for all stakeholders" (Kannan & Li, 2017, p. 23).
Virtual Brand Community	VBC	"specialized, non-geographically bound online communities based on social communications and

		relationships among a brand's consumers" (De Valck et al., 2009, p. 185).
Online word-of-mouth	eWOM	"Any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig -Thurau et al., 2004 & Eelen et al., 2017, p. 873).
Social Identity Theory	SIT	"SIT is a classic social psychological theory that attempts to explain intergroup conflict as a function of group-based self-definitions" (Islam, 2014).
Customer brand engagement	CBE	"Customer engagement is a psychological state that occurs by virtue of interactive, co-creative customer experiences with a focal agent/object (brand)" (Brodie et al., 2011, p. 260).

Table 1 - Definition of terms

1.4 Structure of the study

The structure of this study is based on seven different chapters: introduction, literature review, research question and hypotheses, research methodology, findings and analysis, discussion and conclusion. Below a brief overview of each chapter:

Chapter I - Introduction
Provides a thorough background of this study and investigates the subject's importance. The chapter provides a statement of the problem for which the research is necessary.

Chapter II - Literature review
Reviews the literature and relevant previous studies that discuss the main topics. This includes key concepts to support suggested hypotheses. Main topics discussed include brand loyalty, brand community identification, rewards and consumer gratification and consumer brand engagement in VBCs.

Chapter III - Research Question & Hypotheses

States the main objectives and aim of this research, which guides the development of the research question and relevant hypotheses which are proposed by the researcher.

Chapter IV - Research Methodology

Demonstrates an in-depth analysis of the methodologies and adopted procedures used to lead the research and answer the presented research question. Moreover, the sample size, sample characteristics, instrument for research and collection of data are included in chapter IV.

Chapter V - Findings and Analysis

Presents the collected data and investigates the author's primary data collection. This includes statistical testing of the main hypothesis.

Chapter VI - Discussion

Integrates the main findings of the research and prior studies that were previously reviewed to substantiate the study. Furthermore, this chapter will address practical considerations and research limitations.

Chapter VII - Conclusion and recommendations

Concludes this research and provides the reader practical recommendations and workable future research avenues. This is based on the study's main discoveries and uncovered research limitations.

Chapter II: Literature Review

2.1 Introduction

This literature review summarizes the most significant theories and subjects for this research. This provides the reader with an overview of the current theories used in the field (e.g. SIT). Moreover, these theories have been presented and discussed by previous researchers and are peer reviewed.

To summarise, multiple previous studies guide the author in the analysis of this research. To provide a better understanding and overview of the subject, the literature review is structured and analysed in more detail following the key areas:

1. Marketing and brand loyalty
2. Social Identity Theory (SIT): brand community identification
3. Rewards and Consumer Gratification (UGT)
4. Brand loyalty legacy hypotheses

2.2 Rationale

2.2.1 Marketing and brand loyalty

In recent years, marketing has experienced a considerable change with the rise of online and social communication channels and digital marketing (Eelen et al., 2017; Lamberton & Stephen, 2016). According to the 2021 Global Web Index report, tech savvy customers nowadays spend a daily minimum of two and a half hours on social media. Marketers contribute in building the brand's beliefs and generate a positive impression in the customer's minds which creates a positive attitude towards the specific brand (Foroudi et al., 2018). Consumers are actively participating in an interactive process, as there has been a shift from offline face-to-face conversations and WOM towards the usage of online communication channels. This means that the playing field for marketeers has changed considerably, due to the rise of digital marketing and media (Eelen et al., 2017). There's a variety of tools which enable brands to facilitate and contribute towards the development of customer loyalty (Brodie et al., 2013).

For decades, marketers have tried to attribute brand loyalty and customer retention to long-term profitability, however they have not fully understood how to achieve this ultimate goal. Therefore, marketers have invented new strategies and loyalty programs to help build loyalty with limited information of the impact and factors that influence them (McAlexander et al., 2002, Watson and Beck, 2015, Trusov et al., 2009).

More recently, marketers have become more interested in learning about virtual brand communities on the internet. Especially to organise and manage such channels (Alonso Dos Santos et al., 2018). There's a two-way interaction where communities establish relationships between the customer and the specific brand. Therefore, VBCs play an important role in creating value by building long-term relationships where the brand community is customer-centric. Moreover, VBCs can differ considerably depending on the size, platform and social context. (McAlexander, Schouten & Koenig, 2002). Figure 1 shows the Key Relationship factors in VBCs.

Traditional Model of Customer–Brand Relationship

Muniz and O'Guinn's (2001) Brand Community Triad
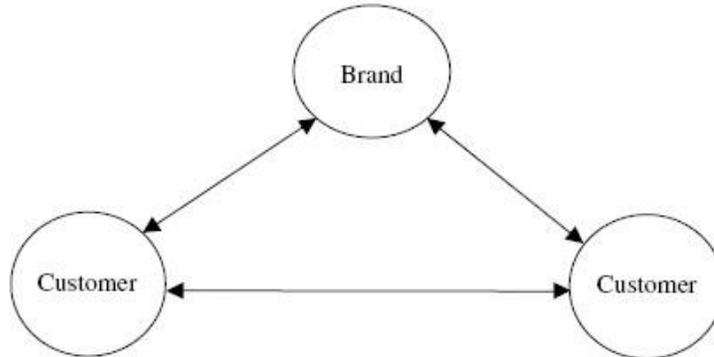
Customer-Centric Model of Brand Community
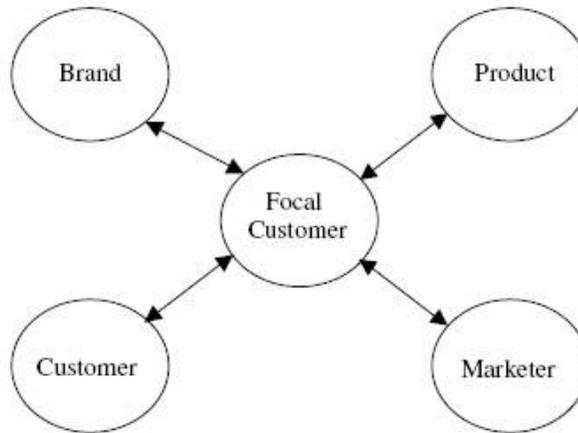
Figure 1 - Key Relationships of Brand Community (McAlexander et al., 2002, p. 39)

VBCs can be both consumer or organisation-initiated, and as portrayed above, have no geographical barriers (Islam and Rahman, 2017). Due to the complexity of the concept of VBC, researchers have identified several research models. The first line of research focuses on the nature of brand communities, whereas the second line of research analyses, measures and interprets the results of participation in VBC (Alonso Dos

Santos et al., 2018). While investigating the nature of brand communities is important, this study will focus particularly on the latter. This will help to bridge the gap between understanding the results of marketers strategies and programs.

Previous research examined how the changing communication channels differentially impacted the relationship between brand loyalty and WOM (Eelen et al. 2017). "Social bonds established within brand communities create a special environment to develop communication strategies to conquer consumers' trust and foster customers' loyalty" (Coelho, et al., 2018, p. 102, Habibi et al., 2014a , Algesheimer et al., 2005, Bagozzi and Dholakia, 2002, Laroche et al., 2013, Laroche et al., 2012, Labrecque, 2014).

Consumer loyalty and development is considered as one of the most desired marketing goals. However, the concept of loyalty has been described and operationalised in many ways (Eelen et al., 2017). In general, researchers agree that brand loyalty consists of both attitudinal loyalty like positive feelings towards a brand and behavioral loyalty including repeat purchases. (Eelen et al., 2017, Dick & Basu, 1994). Marketers increasingly aim to build meaningful relationships with their customers via the social identity theory, offering a theoretical view on how consumer and brand relationships can be monitored. This represents the fundamental value of this research and it investigates the consumer-brand relationships in VBCs with respect to the consumer's perceived value (Bhattacharya and Sen, 2003 and Kaur et al., 2020). However, mainstream research regarding brand loyalty abandons the role of brand identity and how consumers identify themselves with brands (He et al., 2012).

2.2.2 Social identity theory (SIT): brand community identification

Tajfel and Turner (1979) describe the concept of brand community identification, as built onto the social identity theory (Brewer, 1991). This perspective places brand identity as the key antecedent to brand identification, therefore suggesting that consumers create 'pro'-brand behaviour for which they identify themselves with (He et al., 2012). Moreover, social identity is an essential qualification in order to consider a social group to be a community (Mousavi et al., 2016, Muniz and O'Guinn, 2001).

"Social identity generates individual behaviors that benefit the group, with the expectation of self-enhancement through a boost in personal and collective self-esteem"

(Alonso Dos Santos et al., 2018, p. 275). In other words, the consumer is driven to enhance self-identity, by identifying with social groups like VBCs (Kaur et al., 2020). This reasoning goes hand in hand with the social exchange theory (SET), which centers the people's expected rewards from social efforts (Blau, 1964), therefore demonstrating the alignment with the perspectives adopted in this study.

Accordingly, individuals enhance personal and collective self-esteem, by connecting with other individuals and groups that display their desired identity (Tajfel & Turner, 1979, Mousavi et al., 2016). BCI manifests a "primary psychological substrate for the kind of deep, committed, and meaningful relationships that marketers are increasingly seeking to build with their customers" (Bhattacharya and Sen, 2003, p. 76). Showing the importance of further research in the area in relation to brand loyalty.

Muniz and O'Guinn (2001, p. 412), argue that "community is a core construct in social thought", which shows the importance of research that analyses the SIT in virtual brand communities. The SIT is an appropriate model to examine the consumer-brand relationships, as brand identification has important suggestions to maintain relationships between brands and consumers (Lam et al., 2010). Current research on virtual brand communities focuses directly on the interaction between consumers who identify with the same brand, as consumers emphasize similarities with other members and differences from non-members. (Hollebeek, 2018). This demonstrates that members of virtual brand communities take part in collective behavior, to praise the brand and help other members who identify with the brand (Lam et al., 2010). Therefore, Bhattacharya et al., (1995) developed six statements about brand community identification that were adapted within the research instrument.

Marketers have two ways of exploring the effects of brand identification, mainly the longitudinal approach which relates to customer relationship marketing or socio psychological benefits, and competitive dynamics in relation to brand equity. The latter motive in particular, exhibits theoretical alignment with UGT rewards and consumer engagement. Consequently, this research adapts the social identity theory to explain and predict consumer behaviour and loyalty in the context of VBCs (McAlexander et al., 2002, Muniz and O'guinn, 2001, Kaur et al., 2020).

2.2.3 Rewards and Consumer Gratification (UGT)

After investigating brand loyalty and its concept, it is important to further understand how this marketing approach is associated with other constructs like rewards. The "Uses and Gratifications" approach or otherwise known as UGT, was first introduced by Katz et al. (1974) and shows that content, communication and gratifications in a specific context (e.g. VBCs) are the key drivers for a consumer's online use. Accordingly, the consumer actively engages with the brand and therefore demonstrates the relationship between reward and CBE (Stafford et al., 2004). UGT studies three main concepts according to Wimmer and Dominick (2013), presented as follows:

1. The motives behind audience engagement in various forms of media (e.g. virtual brand communities) behavior.
2. The consumer gratifications, which attracts and holds the audience to different types of media.
3. The environment that fulfills the social and psychological needs of audiences (social identity theory).

The latter shows the alignment between BCI and rewards where socio psychological benefits and competitive dynamics are met and VBCs are considered a substitute for personal relationships. Nevertheless, other researchers like Ruggiero (2000), find these main concepts too narrow. Thus, explaining the importance of this study to develop a better understanding of the factors influencing brand loyalty and the effects of participation.

Internet users are goal-oriented and driven by motivations while they are actively interacting with social media (Kaur et al., 2020). Alnawas and Aburub, (2016, p. 314) indicate that "Customers' interaction experiences with surrounding media can themselves be a source of value as they provide users with a number of benefits." Based on these personal motivations, Katz et al. (1973 p. 167) identified four different types of benefits that consumers can derive (Alnawas and Aburub, 2016), described below:

Social integrative benefits - nourish contact with family, friends and the world, online (e.g. VBCs) or face-to-face.

Personal integrative benefits - nourish credibility, stability, confidence and status surrounding one's self in a virtual group setting.

Cognitive benefits - nourish knowledge, information and understanding of the brand.

Hedonic benefits - or in other words, affective needs are focused on strengthening pleasurable and emotional experience

Furthermore, hedonic benefits are focused on entertainment, opportunities for self-expression and exploration and therefore show theoretical alignment with the social identity theory. Consumers receive pleasure by engaging with their favourite brand communities and thus share interests and brand-related information (Islam and Rahman, 2017). Consequently, this research adopts a fundamental social identity/reward approach showing the necessity to recognize the complexity that affects this association. Previous research in the area particularly focused on hedonic and informational benefits in VBCs, which does not provide insights into all benefits consumers derive (Kaur et al., 2020, Hollebeek, et al., 2016).

Rewards considerably enhance satisfaction and brand awareness in addition to generating favorable customer attitude towards virtual brand communities (Islam and Rahman, 2017, Jang et al., 2008) Companies are encouraged to satisfy consumer motives by creating brand-related content that emerges from community based conversations (Malthouse et al., 2013, Brodie et al., 2013). Despite its importance, literature regarding the role of reward in driving brand loyalty remains limited (Islam and Rahman, 2017, Kaur et al., 2020, Muntinga et al., 2011). Based on prior research by Alnawas and Aburub (2016), Lee (2013), Islam (2017) and Kaur (2020), this research investigates the impact of UGT-based reward on consumer motivation to engage in VBCs and the impact on brand loyalty.

2.2.4. Consumer brand engagement

To develop a solid and persuasive marketing strategy, it's important to develop a deeper understanding of the key elements that form consumer's behaviour. The Consumer engagement stems from the "expanded domain of relationship marketing" (Brodie et al.,

2013, p. 106) and started to gain more attention in the academic marketing literature from 2005 (Brodie et al., 2011, Islam and Rahman, 2016, Kaur et al., 2020). As brand is the main object around which members of VBCs engage, the researcher adopts CBE as one of the main concepts that impact brand loyalty.

Consumer brand engagement (CBE) has obtained more attention in the theoretical marketing literature, where further research is required in the IT context (Kaur et al., 2020). Accordingly, the Marketing Science Institute has proposed to undertake further research on consumer engagement, especially in the field of VBCs or other technological contacts, reflecting the rising importance (MSI, 2018). VBCs and CBE offer a social dimension which is important for consumers to derive the benefits of rewards and to create a brand identity.

In the context of VBCs, the "consumer" is not necessarily a paying customer. Therefore, researchers have been adopting the term "consumer" rather than customer (Hollebeek, 2011, Kaur et al., 2020). In summary, this research will refer to CBE as "consumers' psychological state of mind and intensity of their awareness, affection, participation, and connection with the brand" (Paruthi and Kaur, 2017, p. 133).

Ashley et al. (2011), propose to examine consumer engagement through the relationship marketing theory. This broader lens through which consumer engagement is examined, recognises the complex and co-creative environments where consumers engage in consumer behaviour centered experiences (Brodie et al., 2013). Relationship marketing broadly reflects consumers' interactive brand experiences where engagement is two-way and interactive of nature (Islam et al., 2019b and Brodie et al., 2011, Vivek et al., 2012). Moreover, UGT and CBE both illustrate a proactive view of consumers. In the online environment, consumers are not only on the receiving end, but are actively contributing towards the creation of content, presenting the two-way nature (Kaur et al., 2020, Hollebeek and Chen, 2014).

In recent years, researchers have studied consumer engagement on social media in virtual brand communities (Baldus et al., 2015, Kaur et al., 2020, Dessart et al., 2015, Hollebeek et al., 2014). Baldus (2015) and Kaur (2020) focus on consumers' motives to

continue interacting with VBCs based on various elements. However, these motives all have one element in common, which are both hedonic and utilitarian rewards.

It's notable that a large amount of people spend their time engaging in these virtual brand communities, showing the importance of further investigating the underlying forces that influence engagement within online communities (Baldus et al., 2015, Islam and Rahman, 2017, Kaur et al., 2020). Therefore, this study investigates the collective impact of these three key characteristics (brand community identification, UGT rewards and consumer brand engagement) of virtual brand communities with regards to brand loyalty.

2.2.5 Brand loyalty legacy hypotheses

As discussed in the previous section, it is crucial to understand what elements have a potential influence on brand loyalty in VBCs. Therefore, to guide this research, SIT's brand community identification, UGT-based rewards and consumer brand engagement will be explored in more detail. The author defines this facet as the desire to enhance self-identification and gratification, which is measured by consumer brand engagement. That in turn indicates the level of loyalty towards a brand of choice. Accordingly, the author proposes the following hypotheses:

1. *H_1: Brand community identification has a significant and positive affect on brand loyalty in VBCs.*
2. *H_2: Reward has a significant and positive affect on brand loyalty in VBCs.*
3. *H_3: Consumer brand engagement has a significant and positive affect on brand loyalty in VBCs.*

According to Islam and Rahman (2017), brand loyalty can be triggered, built and fostered by engaging with "consumers" in VBCs. Previous research shows that CBE is a key factor in generating brand loyalty. However, quantitative research in the association of both is lacking (Kaur et al., 2020, Brodie et al., 2013, Hollebeek, 2011).

In summary, quantitative research appears to be the best way to test the legacy hypotheses, as the aim of this study is to measure the motivations and direct effects of participation in VBCs. Questionnaires allow for relevant screening questions, to rule out

students who are not members of at least one virtual gaming brand community. Nevertheless, it is necessary to observe that both qualitative and longitudinal research provide key insights into the area of research (Baldus et al., 2015).

2.2.5.1 Brand loyalty research model

Consistent with the above hypotheses, the research model is presented in figure 2. The research model proposes that UGT-based reward, brand community identification and consumer brand engagement have a role in building and maintaining brand loyalty in VBCs (Kaur et al., 2020). Accordingly, BCI indicates the degree to which users identify with the VBC (Kaur et al., 2020 & Chang et al., 2013) and thus is one of the main determinants of community engagement and loyalty. The research model also underlines the effects of reward gratification and CBE on brand loyalty. As mentioned before, previous research indicates that "community characteristics" affect loyalty positively (Chan et al., 2014, Islam and Rahman, 2017 and Kaur et al., 2020). Therefore, the proposed model allows the author to determine which variables in particular have a significant impact and investigate if the independent variables (BCI, reward and CBE) predict a positive outcome for the dependent variable (brand loyalty).
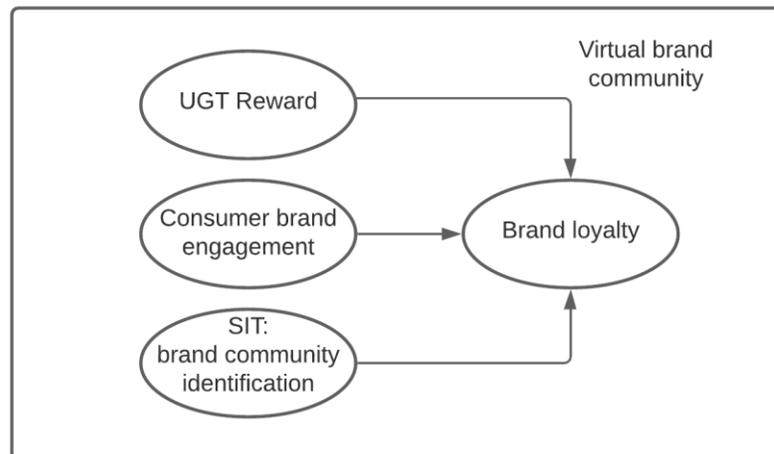
Figure 2 - Proposed research model

The three criteria (reward, CBE and BCI) are important for the brand community owners. Marketing practitioners should allocate their resources towards the criteria that have the highest impact and therefore distribute the investment accordingly.

2.3 Conclusion

The aim of this chapter was to provide insights into the relevant academic marketing literature. This to obtain further knowledge around the main constructs that compose the thesis topic and support the author to evaluate the critical resources which in turn is necessary to conduct a thorough research.

Therefore, it is necessary to take the study's main purpose into consideration: whether or not there's a significant impact of brand community identification in combination with the UGT theory on building brand loyalty in VBCs. It also attempts to analyse the consumer engagement, to address whether or not an increase in consumer engagement positively influences brand loyalty.

Based on the discussed information in the literature review, it is feasible to conclude that multiple studies have attempted to explain the impact of social identity theory (BCI) and gratification on brand loyalty within virtual brand communities. As marketers have tried to identify the aspects that influence brand loyalty, which in turn shapes business strategies.

Moreover, it is important to understand the legacy hypothesis that suggests that BCI, reward and CBE positively affects brand loyalty in VBCs, where CBE might react as an intermediary.

Even though there has been previous research conducted on the topics described in this chapter, there is no proof of research that took virtual gaming brand communities amongst third-level students into consideration.

Chapter III: Research Question

3.1 Research aim

The research's main objective is to explore the underlying forces that influence brand loyalty, i.e. brand community identification, reward and consumer brand engagement in virtual gaming brand communities. In other words, the research attempts to investigate whether the variable brand loyalty is positively affected by other variables like BCI, reward and CBE, among third-level students.

3.2 Research question

Based on the literature review, this research will respond to the following question:

What is the role of brand community identification, reward and consumer brand engagement on brand loyalty in virtual gaming brand communities among third-level students?

3.3 Hypothesis development

This section describes the situation and formation of the proposed hypotheses, associated with this study. According to Creswell et al. (2017, p. 129), hypotheses are the prediction of researchers about the connection between distinct variables. Moreover, a literature background of each hypothesis will be provided.

The hypotheses for this study are the following:

Null hypotheses (H_0)

H_1: Brand community identification has no significant or positive affect on brand loyalty in VBCs.

H_2: Reward has no significant or positive affect on brand loyalty in VBCs.

H_3: Consumer brand engagement has no significant or positive affect on brand loyalty in VBCs.

Alternate hypotheses (H$_a$)

H$_1$: Brand community identification has a significant and positive affect on brand loyalty in VBCs.

H$_2$: Reward has a significant and positive affect on brand loyalty in VBCs.

H$_3$: Consumer brand engagement has a significant and positive affect on brand loyalty in VBCs.

3.3.1 Brand community identification positively affects brand loyalty in VBCs

Consumers are motivated to enhance their self-identity via social groups like VBCs (Lam et al., 2010). Therefore BCI is a key indicator of relationship strength and quality in VBCs (Kaur et al., Chang et al., 2013). Gaming companies are establishing brand-based virtual communities to build, maintain, and further strengthen consumer loyalty (Islam and Rahman, 2013). Accordingly, members that are strongly identifying, tend to participate more actively in community discussions (Muniz and Schau, 2005). Therefore the author hypothesizes:

H$_1$: Brand community identification has a significant and positive affect on brand loyalty in VBCs.

3.3.2 Reward positively affects brand loyalty in VBCs

Community members desire the benefits of rewards though participating in their favourite VBC. Therefore, reward is an essential motivator for driving engagement in VBCs. While hedonic benefits focus on enjoyment, entertainment,... according to Baldus (2015), utilitarian rewards focus on functional rewards like deals and incentives. In other words, rewards refer to the degree of monetary or psychological value for its online proactive members (Jang et al., 2008). According to Doorn et al., (2010) reward affects consumer behavior and loyalty by choosing one particular gaming brand community among the competitive set and engaging with such virtual communities for "co-creative activities". Hence, the connection between rewards and brand loyalty is hypothesized as follows:

H$_2$: Reward has a significant and positive affect on brand loyalty in VBCs.

3.3.3 Consumer brand engagement in a VBC positively affects brand loyalty

Brand loyalty is outlined as "biased behavior response expressed overtime by some decision-making unit with respect to one or more alternative brands out of a set of such brands" (Jacoby and Chestnut, 1978, p. 80). Companies frequently seek diverse initiatives to trigger, build and increase brand loyalty as it produces a competitive advantage to businesses (Winters and Ha, 2012, Islam and Rahman, 2017). One way to increase brand loyalty is to capture customers in a virtual brand community, which in turn increases the organisational performance (Dessart et al., 2015). According to De Vries and Carlson (2014), "the experience offered by consumer engagement helps in developing an emotional connection with consumers that makes them brand loyal." Accordingly, brand loyalty can be strengthened by engaging with consumers in gaming-related brand virtual communities (De Valck et al., 2009).

Prior research by Hollebeek (2011) demonstrates the link between CBE and brand loyalty, for which customer engagement possibly enhances brand loyalty through the increasing effect of interactive experiences and persisting psychological connection beyond purchase[1]. Nevertheless there is a gap in empirical research into the association of both. Therefore, the link between customer engagement and brand loyalty is hypothesized as follows:

H3: Consumer brand engagement has a significant and positive affect on brand loyalty in VBCs.

3.4 Research objectives

The author of this research will focus on the following objectives outlined below, to address and respond to the aim of this research:

1. An overall investigation into brand loyalty for third-level students in virtual gaming brand communities.

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[1] As many online games are free-to-play, there is not always an immediate purchase. Therefore purchase can be replaced here by downloading and/or playing the game.

2. It will examine whether or not brand community identification positively influences brand loyalty in VBCs.

3. It will investigate whether or not rewards positively affect brand loyalty in VBCs.

4. It will examine whether or not consumer brand engagement in VBCs positively influences brand loyalty, or if it reacts as a possible intermediary.

5. Lastly, it seeks to replicate key findings of previous research (i.e. Kaur, Paruthi, Islam and Hollebeek, 2020), on brand loyalty within VBCs.

To the knowledge of the dissertation's author, this is the first study on brand community identification, reward and CBE towards brand loyalty to be conducted within the context of the third-level students group, considering BCI, reward and CBE as independent variables and brand loyalty as the dependent variable, which is the main factor for this research.

To summarise, this chapter defines the research aim and indicates the exact research question, including the main hypotheses that will further guide the research around the subject. The following chapter justifies and specifies the research methods chosen to collect and analyse the data.

Chapter IV: Research Methodology

4.1 Introduction

The purpose of research methodology is to delineate the considered course of action to achieve the objectives and aim of the dissertation. Research follows a sequential approach and is therefore used to answer the identified research problem including achieving the goals of this study (Taylor and Bodgan, 1998). "Research philosophy is an overarching term relating to the development of knowledge and the nature of that knowledge" (Saunders et al., 2009, p. 130)

The '**research onion**' suggested by Saunders, Lewis and Thornhill (2007) is used as a reference point to guide the research and construct this chapter. The research onion model (figure 3) demonstrates the different stages that researchers must follow when conducting and formulating research.
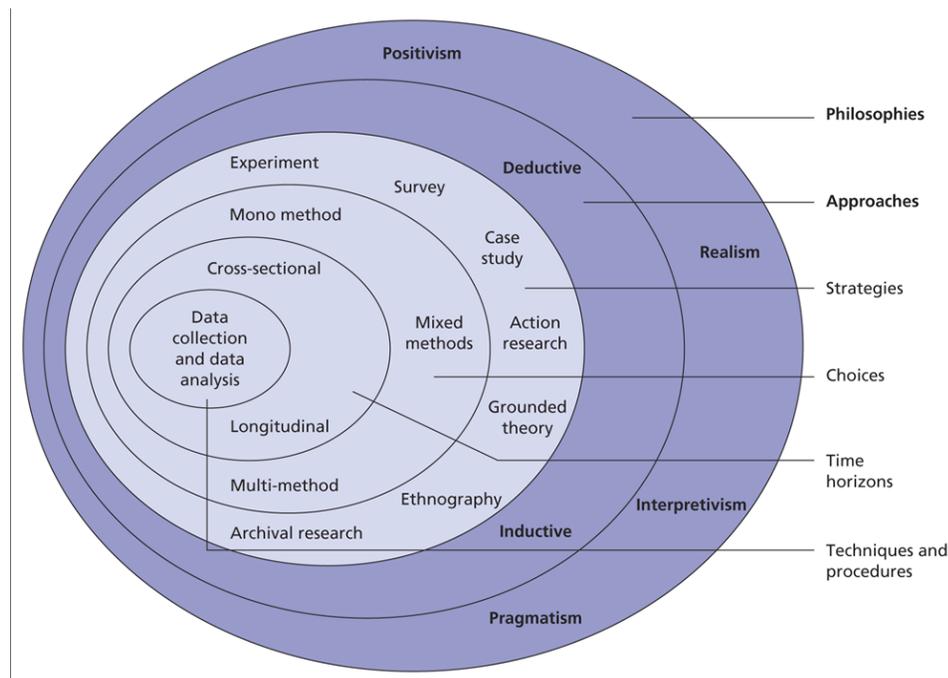
Figure 3 - Saunders' research onion (Saunders et al., 2007).

Therefore, to systematically and critically investigate a research problem the starting point should be the definition of the research philosophy, followed by the research

approach and strategy, time horizon and ultimately the analysis techniques and procedures used to collect and analyse the data (Saunders et al., 2015).

This chapter explains the methodological approach of this study and covers the following components:

1. A description of the data collection criteria and methods including sampling criteria, tools and procedures used to collect the data.
2. Type of collected data and how it relates to the proposed research question and problem.
3. Explanation & justification of the methods chosen for data analysis. This section dives deeper into the processing (survey) and analysis (linear regression) of the data.
4. Evaluation & justification of the author's methodological approach.
5. This section concludes by outlining the research time frame (figure 5) and ethical considerations.

4.2 Research paradigm

Saunders et al., (2009) determined four types of academic research paradigms. The researcher can choose the most suitable type to investigate the subject selected. These are: Pragmatism, Positivism, Realism and Interpretivism, which are explained below:

Pragmatism - Approaching research from a practical standpoint, is the aim for pragmatism (Saunders et al., 2009). Therefore, it is mostly used within a combination of quantitative and qualitative research. Accordingly, the perception is constantly questioned and interpreted which is considered as a more practical approach.

Positivism - "Focus on strictly scientific empiricist method designed to yield pure data and facts uninfluenced by human interpretation or bias" (Saunders et al., 2015, p. 136). Therefore, the outcome of positivist research is mostly used within quantitative research as it focuses on numerical results.

Interpretivism - Requires the interpretation of the researcher upon analysing the answers (Saunders et al., 2015). In other words, reality can be interpreted differently as

circumstances are subjective. Therefore, it is mostly used within qualitative research as it goes further than just observing the collected data.

Realism - Focus on the researcher's own perception, while taking the context into consideration when explaining an occurrence. According to Phillips (1987, p. 205) realism is described as "the view that entities exist independently of being perceived, or independently of our theories about them." It is therefore compatible with qualitative research.

Nevertheless, there are other researchers that argue that there are but three types of academic research paradigms. Rehman and Alharthi (2016), suggest that the three main paradigms are: positivism, interpretivism and critical theory. This study focuses on **positivism** as the main paradigm. As a positivist researcher, the author will use an existing theory to develop hypotheses and base the research on quantitative numerical data derived via a questionnaire. The aim of this study is therefore not focused on human interpretation or bias, but rather logical interpretations on a large sample size.

4.3 Research Approach and Justification

In academia, there are two types of research approaches, mainly qualitative and quantitative. However, they are occasionally used in combination. In recent years, researchers have chosen a similar approach or a combination of both quantitative and qualitative research (Kaur et al., 2020; Islam and Rahman, 2017; Baldus et al., 2015). Qualitative research focuses primarily on non-numerical data, where concepts, opinions, or experiences are gathered to generate more in-depth insights. On the other hand, quantitative research focuses on numeric data retrieved from a large sample size to find patterns which allows the researcher to test a theory i.e. social identity theory or UGT. Nevertheless, a quantitative approach is limited and does not provide an in-depth analysis of the target group (third-level students) for which a qualitative approach would be useful. Especially, since the cohort of third-level students is very unique in combination with online gaming.

The aim for this study is to examine the relationship between variables, considering BCI, reward and CBE as independent variables and brand loyalty as dependent variables. The main focus is to investigate the evidence based on numerical data, which aligns with

past studies surrounding the subject which have either chosen a quantitative or cross-sectional approach (Kaur et al., 2020, Islam and Rahman, 2017, Baldus et al., 2015 and Dessart et al., 2015). Accordingly, this research is based on a **deductive** approach, where the researcher first discusses the theory and then designs a research strategy to test the theory. According to Saunders et al., (2015, p. 154), a deductive approach has several important characteristics, such as: a structured methodology, operationalisation, reductionism and generalisation.

In summary, **quantitative** research is the most suitable approach to further investigate brand loyalty. It enables the researcher to use a deductive approach to investigate the cause and effect of the variables and test the hypothesis to further develop the theory, thus bringing insights into the theoretical foundations.

4.4 Research method

Research methods explain the data collection and analysis, as defined by Heath and Tynan (2010). In summary, "data collection is used to evaluate propositions or hypotheses related to an existing theory" (Saunders, 2015, p. 153). As mentioned previously, this study focused on a quantitative positivist approach, as it allows the researcher to test hypotheses and the relationship among variables based on numerical data with a larger sample size. A questionnaire (Microsoft Forms) with closed-ended questions was used to collect and analyse the data to either deny or confirm the hypothesis (Newman and Ridenour, 1988). Accordingly, the collected data is demonstrated in graphs or other visualisations and the results are tested via statistical analysis.

Previous research (Kaur et al., 2020, Islam and Rahman, 2020) used structural equation modeling (SEM) to test and assess the proposed model and relationships between constructs. SEM is a popular methodology in quantitative research as it analyses the relationships of observed variables which is similar to regression analyses. SEM investigates linear and causal relationships among variables, thus focusing on inter-relationships of latent variables (Sánchez, 2005).

However, SEM is a more complex model where the researcher needs to make the model valid first. Therefore, this study focuses on a type of predictive analysis. The

linear regression model is adopted to show the **relationship** between the independent and dependent variables. The factor that is being predicted is the dependent variable (brand loyalty), and fits well with the aims of this research and research question. Linear regression will be discussed in more detail in chapter 5.3 Hypotheses testing.

4.5 Research design

According to Blanche et al., (2006, p. 34), "research design is a strategic approach, which researchers undertake in order to find a connection between research questions and execution." This study is based on a quantitative research design and answers are quantifiable. Accordingly, the main elements that represent this research will be presented and explained in this section. This includes: sample criteria, data collection procedures and analysis of the data.

4.5.1 Sample

The target for this research is third-level students[2], both male and female, aged between 18 and 35 (in 2021) that are part of a virtual gaming brand community. The age chosen for this research is based on the average age for students in third-level education and average age of gamers globally. Moreover, the target group is global as the study did not focus on a specific target location. Before the survey was distributed, participants were given a brief understanding of virtual brand communities.

Consumer engagement

A virtual brand community is a specialised, non-geographically bound online community based on social communications and relationships among a brand's consumers
Examples: Facebook group / Discord community / (sub)Reddit / Twitch channel for your favorite game(s)

Figure 4 - Virtual brand community definition and examples

There were three main criteria that respondents had to fulfil, in order to be eligible to participate in the study. Firstly, the minimum required age to participate in the survey was 18 years. Secondly, the respondent had to be enrolled in third-level education at the

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[2] All education after second-level, including universities, colleges and further education

time of participation. Lastly, respondents had to be part of a virtual gaming brand community.

4.5.2 Sampling techniques

Bryman and Bell (2015) defined two sampling techniques used by researchers today, these are: probability sampling and non-probability sampling. Probability sampling offers all members of the population (e.g. students) an equal chance. contrarily, non-probability sampling does not select all members of that target population

For the aim of this research, the **probability sampling** technique was selected, as it allows the selection of a sample that is based on random sampling. This means that every individual of the population of third-level students had a chance of being included. Individuals were specifically recruited by posting in virtual gaming communities via the internet. This includes Discord gaming communities (e.g. Irish Collegiate Esports), Facebook gaming groups, Subreddits and participants responded on a voluntary basis.

4.5.3 Sample size and characteristics

This research collected a sample of 247 across all geographic regions for which 150 (60,72%) were third-level students, who voluntarily responded to the survey. As mentioned before, there were three main criteria that respondents had to fulfil. If respondents did not meet the requirement, they were automatically ruled out. The survey was open for participation for 10 days, for which a total of 102 (41,29%) responses were analysed. Other characteristics of the population can be found in section 5.2 demographic characteristics of respondents.

Previous studies obtained sample sizes between 450 - 602 respondents. However these studies only focussed on one single Indian University, excluding others to participate. Therefore, the author chose to allow a lower amount of responses (102) and instead use the probability sampling technique, allowing everyone that is eligible to partake in the study.

4.5.4 Data collection procedures

The method for data collection had to be appropriate for quantitative research so as to achieve the aim of this study. After considering the alternatives, the author chose to

collect data using an online structured survey with close-ended questions. A questionnaire allows a researcher to gather empirical data from a sample that generates quantifiable results.

The main advantage of online structured questionnaires and why the author opted for this method is the cost and time advantage. According to Carbonaro and Bainbridge (2000, p. 393) there are three important advantages of using a web-based survey research, mainly: fast access to the questionnaire, protection against missing data, and the obtained data can be automatically analyzed and saved in a file format that can be uploaded into a statistics program (e.g. SPSS) Moreover, it allows the collection to be completed on a global basis via online websites which provides easy access to participants that are essential for the data collection process.

Even though collecting online data has a superior response rate, there is still a possibility that respondents provide fake responses or do not answer sincerely. Another disadvantage is that participants need access to the internet (Carbonaro and Bainbridge, 2002). However, taking the aim of the study into consideration, respondents are required to be enrolled in third-level education and be part of a virtual gaming brand community. Therefore, the author expects students to have access to the internet and have the technical affinity to respond to the survey correctly.

4.5.4.1 Pilot

The intention of the pilot is to understand whether or not the survey had to be more refined and the procedures adjusted. Therefore a pilot experiment was completed with 7 respondents. This pilot enables the author to inspect further if the questionnaire is the most appropriate research method to assess the dependent variable (brand loyalty) and also to check if the independent variables (BCI, reward and CBE) are manipulated correctly.

Moreover, the pilot was used to explore if there were any misconceptions or errors in regards to the proposed questions. Participants were asked if they understood exactly what was asked of them and if there was any part of the survey that could be executed differently. Accordingly, the respondents were asked to share their personal perceptions to further improve the overall experience when responding to the survey.

Lastly, this experiment is an important and valuable procedure as it provides a clear overview of what could be modified, thus optimising the researcher's time management. Therefore, all adjustments were implemented before the survey was presented to the general public.

4.5.4.2 Research instrument: questionnaire

The positivist research is considered as empirical research which is free of subjective values Saunders et al. (2009). The research instrument is the questionnaire which undertakes a quantitative approach thus providing numeric data that can be described and analysed. The questionnaire consists of five sections, for which the first section collects demographic data and the last 4 sections represent the measurement scales. Moreover, all of the constructs in the model were measured using well-established scales. The survey employs the seven-point Likert scales, to collect the responses, ranging from "1" (strongly agree) to "7" (strongly disagree).

It is important to acknowledge that the questionnaire is based on previous and recognised studies. The two main studies that guided this research are the study by Kaur, Paruthi, Islam and Hollebeek (2020) and Islam and Rahman (2017). The researchers also studied the relationships between brand community identification, reward, consumer brand engagement and brand loyalty.

The first section (table 2) focuses on demographics and eligibility questions. The author chose to put these at the start of the questionnaire to make sure that non-eligible participants were automatically ruled out. The eligibility questions focus primarily on the fact that participants should be enrolled in third-level education and enrolled in a virtual gaming brand community. Additionally, to make sure participants are active members, the researcher also asked participants how often they visit their favorite virtual gaming brand community in the past 12 months. The consent and further ethical considerations are discussed in section 4.7.

The second section of the survey (table 3) was inspired by Hollebeek et al., (2014) who developed and validated a CBE scale made for specific social media settings (e.g. VBCs). CBE is 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. 149). Accordingly, section 2 incorporates three dimensions, mainly cognitive processing, affection, and activation. They designed three different versions of the scales for which the adapted version was rated using even-point Likert scales.

The third section (table 4) includes the study from Bhattacharya et al., (1995) with regards to Brand Community Identification. This study proposes that consumers, in their role as members, identify with organisations and use the SIT to test and model members' identification with a brand. Moreover, it is discussed how this model can be used in other marketing contexts i.e. VBCs. Therefore, showing alignment with the aims of this research.

Subsequently, the fourth section (table 5) contains research by Baldus et al., (2015) who conducted research on what motivates consumers to interact in online communities continually. They developed a test based on six studies for which the authors developed 11 independent motivations and tested the scale's predictive capacity. Accordingly, all scales measured on a 0–10 Likert-type scale, but were later adapted to 1-7 by Hollebeek et al. (2014).

Finally, the fifth section (table 6) is focused on two aspects of brand loyalty, mainly purchase loyalty and attitudinal loyalty. Chaudhuri and Holbrook, (2001) Accordingly this model included, category-related rewards (i.e. hedonic value and utilitarian value) and brand-level value (i.e. brand differentiation and share of voice). All scales measured on a 1-7 Likert scale, which is consistent with the previous research.

The order of the sections was considered carefully, as to not influence later questions with the previous section. Therefore, a question such as "My main aim of liking "X" is to access deals, offers, coupons available" was left after consumer engagement so as to not influence the answers.

Each section of the questionnaire is explained below (Note: X denotes "my favorite gaming brand community").

Demographic aspects

1	What gender do you identify as?
2	How old are you?
3	Where do you live? (Country)
4	Are you currently enrolled in third-level education?
5	If yes: Are you currently part of a virtual gaming brand community?
7	If yes: How often* did you visit your favorite virtual gaming brand community in the past 12 months?

*frequency is measured on a 4-point Likert scale ranging from "1" (Daily) to "4" (Every 2 - 3 months).

Table 2 – Brand loyalty survey section 1

Consumer engagement (Hollebeek et al., 2014) (Listed below are statements about brand consumer engagement, to what extent do you agree with them?)	
1	X upgrades (downgrades) member privileges
2	Using X gets me to think about the brand
3	I think about X a lot when I'm using it
4	Using X stimulates my interest to learn more about the brand
5	I feel very positive when I use X
6	Using X makes me happy
7	I feel good when I use X
8	I'm proud to use X

Table 3 - Brand loyalty survey section 2

Brand Community Identification (Bhattacharya et al., 1995) (Listed below are statements about brand community identification, to what extent do you agree with them?)	
1	X successes are my successes.
2	When someone praises X, it feels like a personal complement to me
3	When someone criticizes X, it feels like a personal insult to me.
4	When I talk about X, I usually say "we" rather than "they".

5	I am very interested in what others think about X.
6	I have strong feelings for X.

Table 4 - Brand loyalty survey section 3

| **Reward (Baldus et al., 2015)** ||
(Listed below are statements about rewards, to what extent do you agree with them?)	
1	I like X because it is entertaining.
2	I enjoy being immersed in X.
3	My main aim of liking "X" is to access deals, offers, coupons available.
4	X provokes me to participate by offering lucrative deals.
5	Without the special deals provided by X, I would stop being a member of it.

Table 5 - Brand loyalty survey section 4

| **Brand Loyalty (Chaudhuri and Holbrook, 2001)** ||
(Listed below are statements about brand loyalty, to what extent do you agree with them?)	
1	I intend to keep on following X.
2	I will go to X next time I go visit an online brand community.
3	I would readily spend more time on X.
4	I intend to reduce the usage of X in near future.
5	I have a strong preference for X.
6	I will try new variants of X.

Table 6 - Brand loyalty survey section 5

4.5.5 Data analysis

This section provides a clarification of the methods used in the data analysis. Numerical values (i.e. discrete numerical data) were assigned to the answers of the survey to run statistical tests. These values are divided in nominal (e.g. gender) and ordinal (e.g. level of agreement) data. Nominal data is unordered, whereas ordinal variables have a clear

ordering. Sections two to five measure the level of agreement with a 7-point Likert scale. The following table presents the values that were allocated for each response:

(7-point Likert scale)	
Value	**Agreement**
1	Strongly Agree
2	Somewhat Agree
3	Agree
4	Undecided
5	Somewhat Disagree
6	Disagree
7	Strongly Disagree

Table 7 – Values for data coding (7-point Likert scale)

For the purpose of quantitative research, the values were attributed carefully and weighted accordingly. Section one (table 2) exhibits a combination of nominal and ordinal data and it required a different approach when attributing the values (e.g. country or residence), however sections two to five (table 3 - 6) were all weighted with the 7-point Likert scale.

Accordingly, the IBM Statistical Product and Service Solutions (SPSS) was used to prepare and analyse the data. According to Winters at al., (2010) statistical tests are studies of samples, for which the goal is to apply these results to the general population. Therefore, it is important to not only consider the design of the study and sample, but also the choice of statistical tests.

Reliability (consistent results) and validity (accuracy) are two important elements to ensure a high quality study. For all statistical tests, the p-value was considered. The *P* value "represents the probability that the observed outcome was the result of chance" (Winters et al., 2010, p. 214). Therefore, $P <$ (less than) 0.05 is chosen as the cutoff to be statistically crucial. The researcher defined a strategy for data analysis and most

appropriate statistical tests, while taking the research question into account. Table 8 presents all hypotheses and types of tests performed to analyse the results.

Hypothesis	Type of test performed
H_1	Linear Regression test
H_2	Linear Regression test
H_3	Linear Regression test + independent samples t-test

Table 8 - Guideline for hypothesis analysis

4.5.6 Time horizon

According to Saunders et al., (2007) time horizons consist of two types of horizons, mainly longitudinal and cross-sectional. This study is focused on a **cross-sectional** time horizon, where data is collected and presented within an eight month period. Therefore, all stages are presented in figure 5, including information gathering, literature review, methodology selection, data analysis and submission. The author created a Gantt chart with Wrike to organise, plan and execute the research project efficiently. The following Gantt chart (figure 5) lists all steps which are needed to accomplish the research project within the given time period.
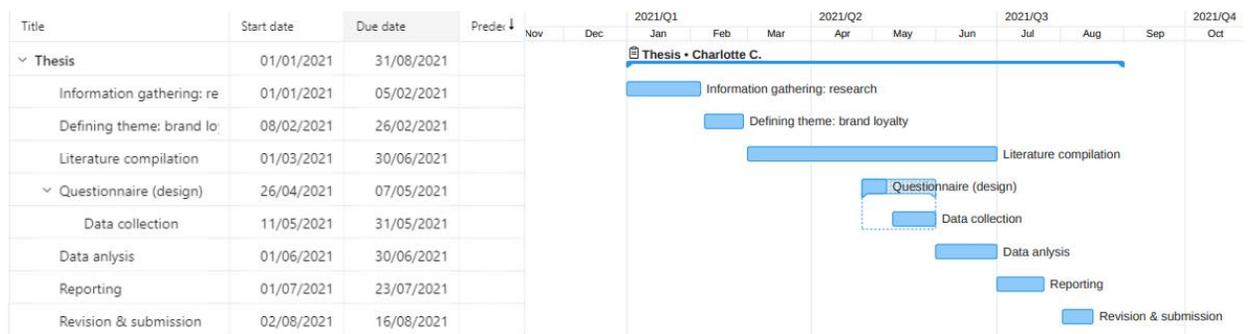

Figure 5 - Time horizon research project

4.6 Ethical considerations

This section is a summary of the guidelines considered by the researcher when conducting research, to avoid possible ethical questions. Therefore, it is important to

reflect on ethical decision making while collecting data and concluding further research. To summarise, the main objective of this section, is to reduce any possible negative effects for participants. The elements composed by the author's ethical considerations are outlined below.

Firstly, respecting anonymity, confidentiality and privacy are taken into consideration. Figure 6 provides a preview of the guidelines provided to every participant, including the guideline for which participants complete the questionnaire on a voluntary basis and have the right to withdraw at any given time (respect for the individual).


Section 1   ...

Research explanation and consent

- This research aims to investigate the relationship factors that influence brand loyalty in virtual gaming brand communities.
- A virtual brand community is a specialized, non-geographically bound online community based on social communications and relationships among a brand's consumers (ie a Facebook group / Discord community / Reddit etc).
- I understand that participation in this survey is voluntary.
- I understand that I can withdraw from the survey at any time by closing the browser window.
- I understand that in any usage of the data within this study, my identity will remain anonymous.
- It will not be possible to withdraw your data from this study once it has been submitted.
- The results of this survey will be presented in my final dissertation which in turn will be submitted to the National College of Ireland.
- The collected data will be retained for 5 years in accordance to the NCI data retention policy.
- I understand that I am free to contact any of the people involved in the study to seek further clarification.

Figure 6A - Guidelines

Secondly informed consent was taken into consideration. The participants were informed of the aims of the research. More specifically, information about data collection and storage guidelines was provided. Before completing the survey, the participant was acquainted with the guidelines (figure 6) and had to agree with the provided "essential information." Figure 7 provides a preview of the survey consent question.

1. I agree to the information mentioned above and I understand this survey is anonymous.

Yes ⌄

Next one

Figure 6B - Research consent

Lastly, to minimize the risk of harm, no vulnerable groups of people were involved and it does not research highly sensitive topics. However, the researcher offers support if required in the contact information, in case of any adverse reactions.

In summary, the researcher included all of the guidelines given above in the first section of the questionnaire. Therefore, respondents were informed of the aim and guidelines of the research.

4.7 Limitations

The purpose of this section is to deliver a broad summary of the limitations thus clarifying the restraints that consequently have an impact on the final results. Specifically, the holistic view of the research and probable limitations will be considered.

1. The **sample profile** is global and therefore might affect the overall results. The sample profile will then be discussed further in 7.2 Recommendations for future research.

2. The **method** chosen to conduct this research (quantitative research) could potentially be limited and too narrow as it focuses on close-ended questions. However, taking into consideration section 4.3 Research Approach & justification, this was considered to be the best method to conduct this study.

3. The **method** chosen to analyse the results (linear regression) could also be a limiting factor as it does not focus on complex path models, for which SEM could potentially provide a more accurate model.

Chapter V: Findings and Analysis

5.1 Introduction

This section delivers an overview and analysis of the collected data. In summary, it presents the analysis process and its final results. However, It is important to keep the research question in mind while analysing the data, which is: "What is the role of brand community identification, reward and consumer brand engagement on brand loyalty in virtual gaming brand communities among third-level students?"

As mentioned above, this section presents the collected data, including demographic characteristics of the sample (third-level students) population, followed by testing of the predetermined main hypotheses. Lastly, this chapter evaluates the limitations of this research and describes the correlations between the main literature and the results to provide a holistic overview.

5.2 Demographic characteristics of respondents

A total of 247 responses were collected. However, only 102 respondents met the requirements set by the researcher described in section 4.6.1 Sample. Moreover, the collected sample (n=102) consisted of 71 (70%) male, 26 (27%) female and 4 (3%) other respondents. As mentioned previously, this study is international and not limited to one single specific geographic region. Across all geographic regions, most responses came from Ireland (42,8%), Belgium (13,2%) and the USA (14,3%).

Additional information about the eligible respondent's age and frequency of activity within their favorite virtual gaming brand community are listed in table 9, figure 8 and 9.

Activity in VBC

	Frequency	Percent (%)
Daily	61	59.8
Weekly	30	29.4
Once a month	9	8.8
Every 2 - 3 months	2	2.0
Total	102	100.0

Table 9 - Frequency of activity

The respondents were asked how often they were active in their favorite virtual gaming brand community. Accordingly, the frequency is allocated into four different groups as exhibited below.
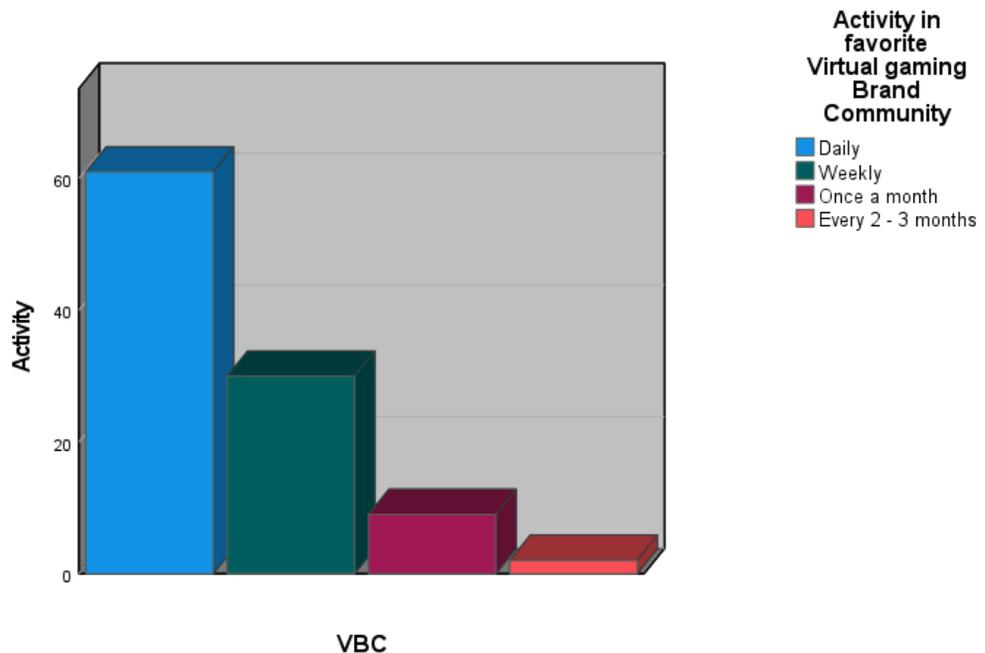

Figure 7 - Activity by group

Table 9 and figure 7 summarise the frequency of respondents' activity within their favorite virtual gaming brand community. One of the primary attributes for this research is connected to obtaining a sample that represents active gaming members within VBCs to enhance the study's relevance and validity.
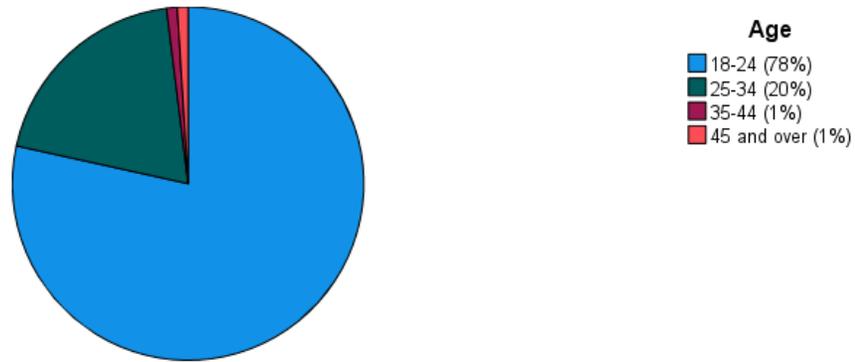
Figure 8 - Respondent's average age

Figure 8 demonstrates the respondent's average age, showing a distinctive difference between age groups one to four. For the purpose of this study, the researcher aimed to investigate the results of third-level students aged between 18 and 35, for which 98% is represented. Therefore, providing consistent results across both age groups.

5.3 Hypotheses testing

Section 5.3 analyses the collected data and evaluates the three proposed hypotheses. The score for the hypotheses is determined by the mean value of the four individual questions containing an equal weighting. To test the result's reliability, the **Cronbach's Alpha** of all the eligible participants was calculated in SPSS.

The reliability values are: for Consumer engagement $\alpha = 0.828$, for brand community identification $\alpha = 0.876$, for Reward $\alpha = 0.758$ and brand loyalty $\alpha = 0.753$. To consider the results to be reliable, a Cronbach's Alpha value of at least 0.7 is essential, however at least 0.9 is optimal. The values were found to surpass the recommended level of $\alpha = 0.70$ and thus illustrates acceptable reliability.

The researcher performed a predictive analysis, using (multiple) **linear regression**. This allows the author to determine which variables in particular are significant, and investigate if the independent variables (BCI, reward and CBE) predict an outcome for the dependent variable (brand loyalty). Accordingly, the results of the linear regressions analysis show the strength of predictors and forecast brand loyalty trends. This allows marketing practitioners to shift their focus to constructs that matter most and that have

the highest impact. The linear regressions analysis includes the following factors according to UCLA (2021):

1. Normal P-P of regression standardized residual: "the plot compares the perceived cumulative distribution function (CDF) of the standardized residual towards the expected CDF of the normal distribution".
2. Residual statistics: denotes the vertical distance between a data point and the regression line, for which each data point is a residual.
3. Analysis of Variance (ANOVA) test: which provides statistics on each of the predetermined variables analysed in the regression equation. It evaluates the impact of the independent variable on the dependent variable by observing the interaction between the two factors and tests the possible positive effect.
4. Scatter-plot (graph): which demonstrates whether or not there is a positive linear relationship between two variables.

5.3.1 Hypothesis 1: Brand community identification

Before analysing the results, the researcher had to verify that the data-set was suitable for linear regression (e.g. measurement on a continuous level: Likert scale). All scales were measured on a continuous 1-7 Likert scale, which is consistent with the previous research (Kaur et al., 2020, Islam and Rahman, 2017).

In order to test the first hypothesis, a linear Regression test was performed to determine if independent variable brand community identification has a significant impact on the dependent variable brand loyalty. This enables the researcher to determine whether the probability of the proposed relationship is real. Based on the normal chart probability (Figure 9), the below plot, it is clear that the existing points consistently follow the approach of the diagonal line. Therefore, it can be concluded that the residual value is normally distributed meaning that the regression analysis procedure has been fulfilled.
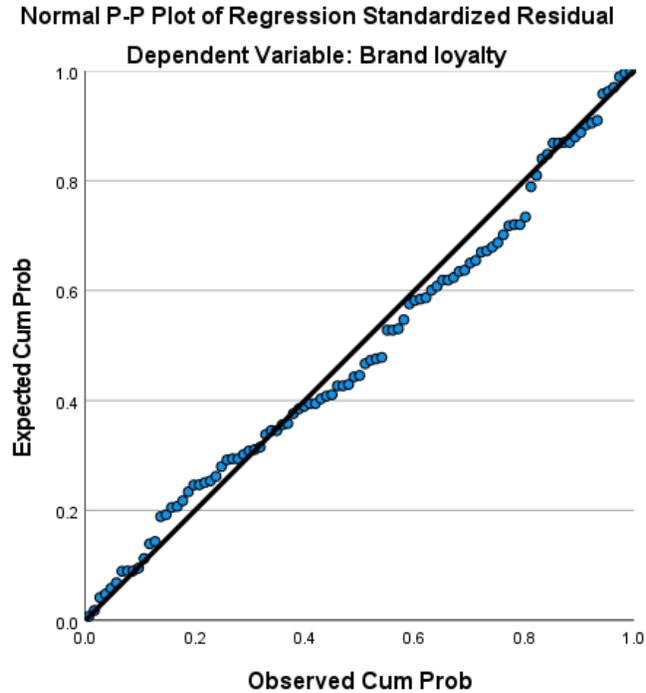
Figure 9 - BCI Plot of regression (standardized residual)

As observed in Table 10 residuals statistics, extreme cases are close to 3 and - 2. However, they do not exceed these values which is important. Moreover, Cook's distance values are minimum .000 and maximum .365. Because none of them are greater than 1, the researcher is confident there are no outlier residuals. Therefore, the statistics reinforce the analysis and the validity of the results for hypothesis 1.

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Residual	-1.79801	2.64564	.00000	.73271	99
Cook's Distance	.000	.365	.014	.041	99

a. Dependent Variable: Brand loyalty

Table 10 - Residuals statistics and Cook's distance (BCI)

The results of the ANOVA (analysis of variance) test indicate that there was evidence to suggest that **brand community identification** (M = 4.08, SD = 1.45) has a significant and positive effect on brand loyalty (M = 3.21, SD = 0.93) in VBCs (t = 7.2, p = .000).

<center>**ANOVA**[a]</center>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.375	1	32.375	59.689	.000[b]
	Residual	52.612	97	.542		
	Total	84.987	98			

a. Dependent Variable: Brand loyalty

b. Predictors: (Constant), Brand community identification

<center>**Table 11** - ANOVA (BCI)</center>

The scatter plot (figure 10) strengthens the assumptions made above, as it shows a positive linear relationship between the two variables.
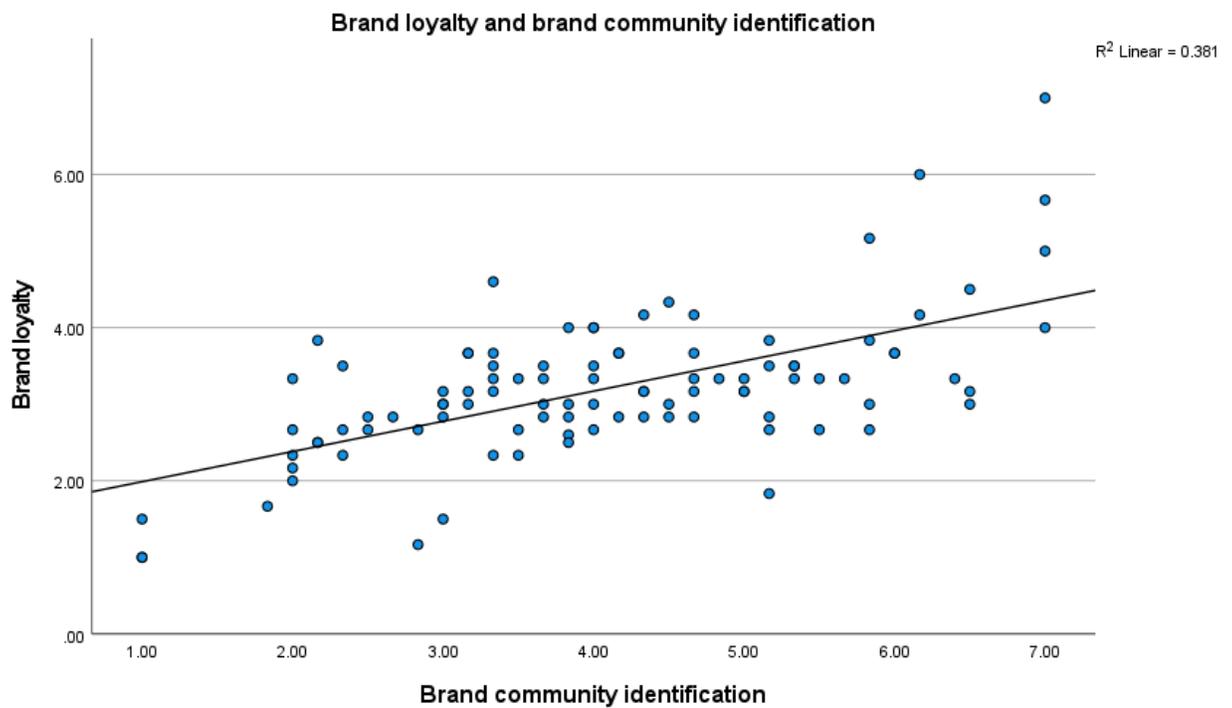

<center>**Figure 10** - BCI/ BL: positive linear relationship</center>

In summary, due to the fact that the *p*-value is < (less than) 0.05 the results *reject* the first null hypothesis and confirms that **brand community identification** has a significant and positive effect on brand loyalty.

5.3.2 Hypothesis 2: Reward

In order to test the second hypothesis, a linear Regression test was performed to determine whether or not independent variable reward has a significant impact on the dependent variable brand loyalty. Based on the normal chart probability (Figure 11), it is clear that the existing points consistently follow the approach of the diagonal line, with a small deviation. Therefore, it can be concluded that the residual value is normally distributed meaning that the regression analysis procedure has been fulfilled.
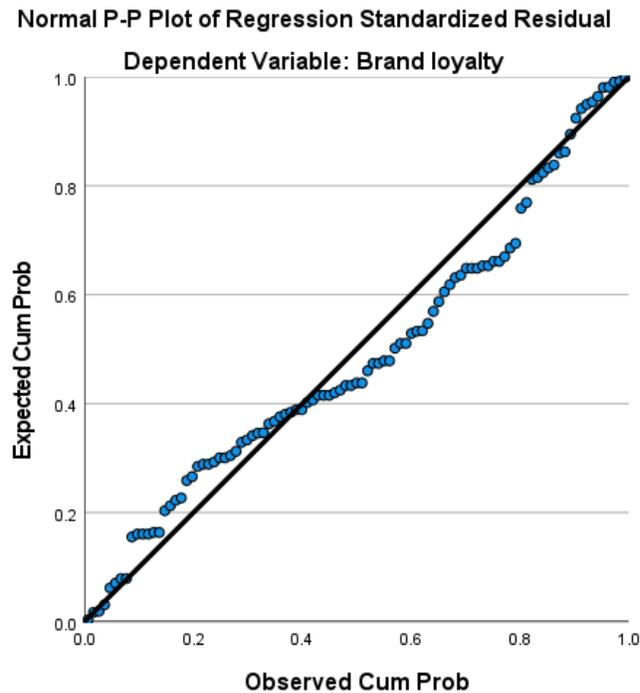
Figure 11 – Reward Plot of regression (standardized residual)

As observed in Table 12 residuals statistics, extreme cases are close to 3 and - 2. However, they do not exceed these values. Moreover, Cook's distance values are minimum .000 and maximum .541. Because none of them are greater than 1, the researcher is confident there are no outlier residuals. Therefore, the statistics reinforce the analysis and the validity of the results for hypothesis 2.

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Residual	-2.34993	2.72727	.00000	.85201	99
Cook's Distance	.000	.541	.017	.059	99

a. Dependent Variable: Brand loyalty

Table 12 - Residuals statistics and Cook's distance (Reward)

The results of the ANOVA test indicate that there was evidence to suggest that **reward** (M = 3.93, SD = 1.1) has a significant and positive effect on brand loyalty (M = 3.21, SD = 0.93) in VBCs (t = 5.851, p = .000).

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.175	1	14.175	19.327	.000[b]
	Residual	71.139	97	.733		
	Total	85.314	98			

a. Dependent Variable: Brand loyalty

b. Predictors: (Constant), Reward

Table 13 - ANOVA (reward)

The scatter plot (figure 12) strengthens the assumptions made above, as it shows a positive linear relationship between the two variables.
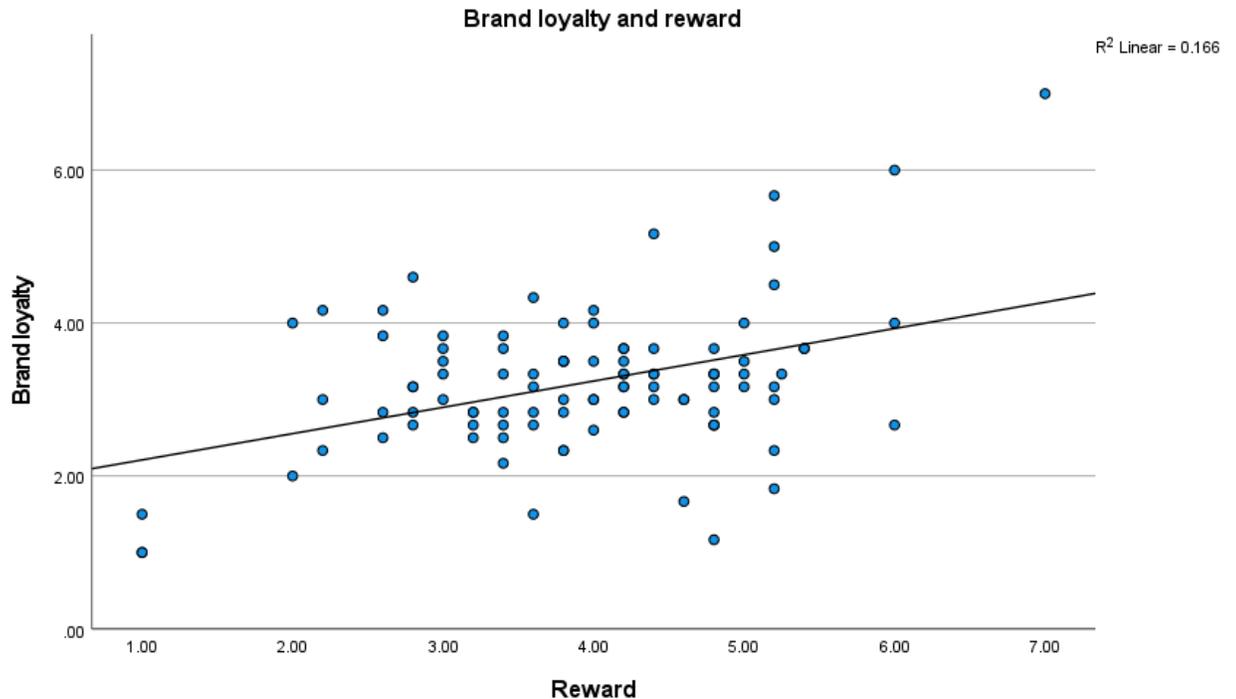
Figure 12 - reward/ BL positive linear relationship

In summary, due to the fact that the *p*-value is < 0.05 the results *reject* the second null hypothesis and confirms that **reward** has a significant and positive effect on brand loyalty

5.3.3 Hypothesis 3: Consumer brand engagement

In order to test the third and final hypothesis, a linear Regression test was performed to determine whether or not the independent variable consumer brand engagement has a significant impact on the dependent variable brand loyalty. Based on the normal chart probability (Figure 13), it is clear that the existing points consistently follow the approach of the diagonal line. However it is important to note that the deviation is more significant than reward. Nevertheless, it can be concluded that the residual value is normally distributed meaning that the regression analysis procedure has been fulfilled.
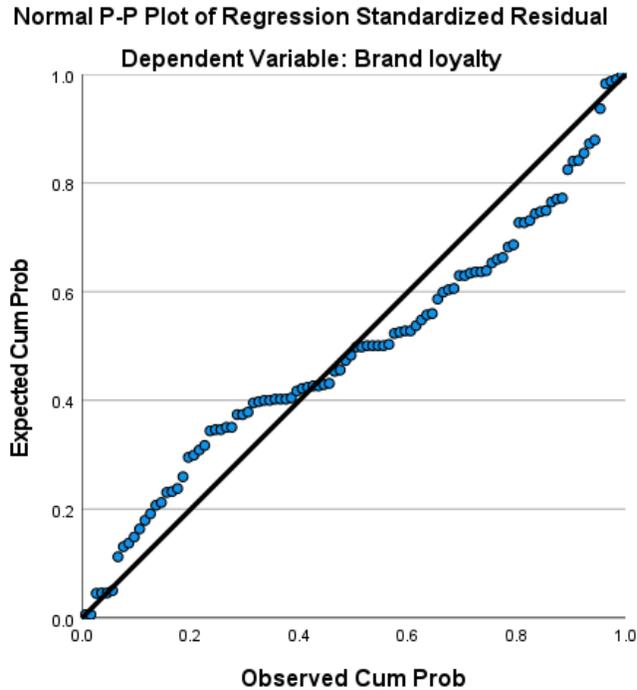
Figure 13 - CBE Plot of regression (standardized residual)

Moreover, as observed in Table 14 residuals statistics, extreme cases are close to 4.5 and - 2, which shows a slight deviation compared to table 10 and 12. Accordingly, Cook's distance values are minimum .000 and maximum .788. Because none of them are greater than 1, the researcher is confident there are no outlier residuals. Therefore, the statistics reinforce the analysis and the validity of the results for hypothesis 3.

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Residual	-2.12767	4.58392	.00000	.83394	100
Cook's Distance	.000	.788	.018	.082	100

a. Dependent Variable: Brand loyalty

Table 14 - Residuals statistics: Cook's distance (CBE)

The results of the ANOVA test indicate that there was evidence to suggest that **consumer brand engagement** (M = 2.75, SD = 0.90) has a significant and positive effect on brand loyalty (M = 3.21, SD = 0.93) in VBCs (t = 7.25 , p = .000).

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.764	1	16.764	23.861	.000[b]
	Residual	68.851	98	.703		
	Total	85.614	99			

a. Dependent Variable: Brand loyalty

b. Predictors: (Constant), Consumer brand engagement

Table 15 - ANOVA (CBE)

The scatter plot (figure 14) strengthens the assumptions made above, as it shows a positive linear relationship between the two variables.
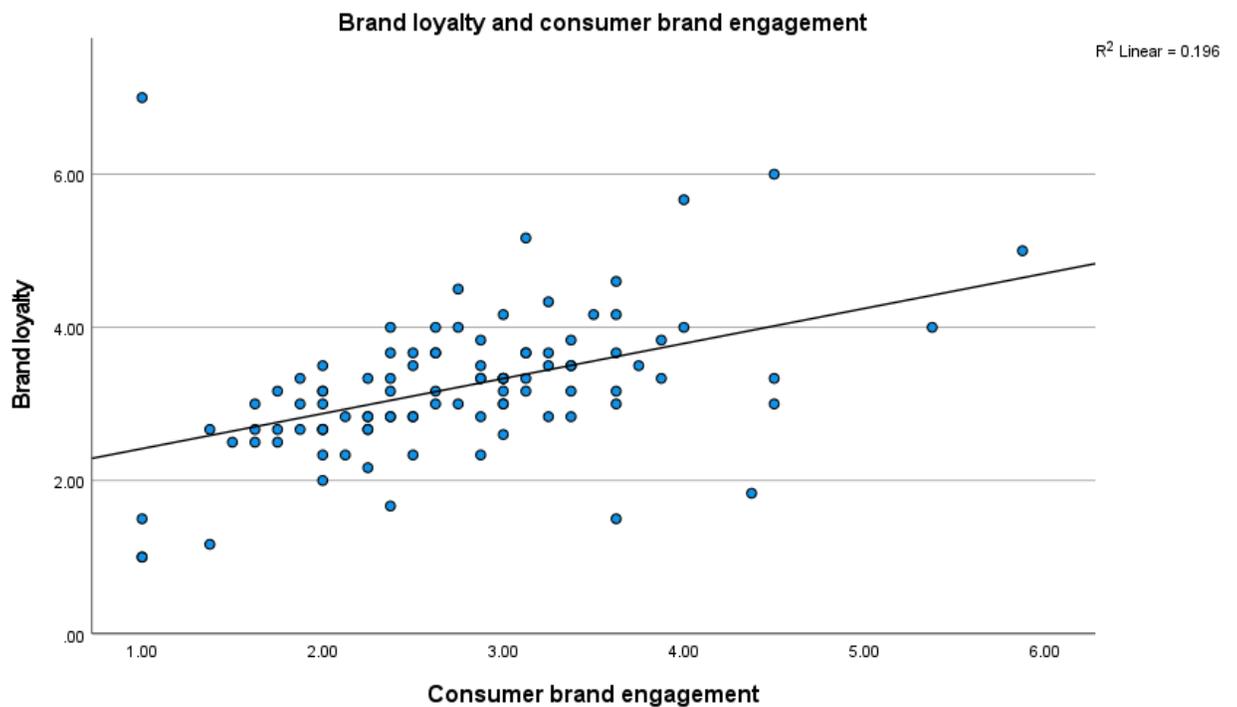

Figure 14 – CBE/ BL positive linear relationship

In summary, due to the fact that the *p*-value is < 0.05 the results *reject* the third null hypothesis and confirms that **consumer brand engagement** has a significant and positive effect on brand loyalty

Following the consumer brand engagement findings, the researcher performed an independent sample t-test to determine if there are differences in the magnitude of brand loyalty experienced by respondents who are engaging in VBCs on a daily basis compared to a weekly basis. An independent sample t-test compares the means of two groups to determine if there is statistical evidence that the associated population (daily and weekly active members) means are significantly different. However, the results of the independent samples t-test indicate that there was no significant difference between members who are active daily (M = 3.1, SD = .91) and weekly (M = 3.3, SD = .96), *t* = -1.461, *df* = 88, *p* = 0.682.

Moreover, when including all independent variables (multiple regression), their significant behaviour changes. This is an important finding, which means that when we add the other independent variables, (BCI and reward), the behaviour for significance (*p*) will change as illustrated in table 16 below. This demonstrates that when all variables are represented, consumer engagement becomes less statistically significant (*p* > 0.05) compared to brand community identification and reward.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.980	.310		3.166	.002
	Consumer brand engagement	.145	.094	.140	1.537	.128
	Brand community identification	.305	.062	.475	4.897	.000
	Reward	.150	.074	.176	2.023	.046

a. Dependent Variable: Brand loyalty

Table 16 - Multiple regression

5.4. Conclusion

This chapter provided a brief overview associated with the primary data collection. The results analysed are significant and answer the main research question: "What is the role of brand community identification, reward and consumer brand engagement on brand loyalty in virtual gaming brand communities among third-level students?" However, it is important to note that there are limitations that were identified during the analysis of the results. The limitations are discussed in detail in section 6.2 Limitations.

Chapter VI: Discussion

6.1 Introduction

This chapter's main objective is to debate the research key findings. Therefore, it is important to take the broader context and factors presented in prior research into account. Moreover, this chapter incorporates two main areas of focus:

1. The limitations of the research.
2. Other practical considerations.

Furthermore, the discussion contributes towards existing research and its implications by evaluating results and findings that are conflicting.

6.1.1 Hypothesis 1: Brand community identification

The relationship between brand community identification and brand loyalty has been widely investigated by other researchers that suggest there is a strong relationship between the two factors (McAlexander et al., 2002, Muniz and O'guinn, 2001, Kaur et al., 2020, Islam and Rahman, 2017). Previous research in the area focused primarily on quantitative research, combining other factors like reward and CBE to describe the outcomes and potential advantages of engaging with consumers in VBCs. The research allowed the author to answer part one of the research question: "the role of **brand community identification** on brand loyalty in virtual gaming brand communities among third-level students."

After running the analysis, the findings *support* the hypothesis that brand community identification has a significant and positive affect on brand loyalty in VBCs. Thus, aligning with prior findings.

Moreover, brand community identification is the *most significant construct* when combining all factors together (table 16). This confirms that consumers create 'pro'-brand behaviour in VBCs for which they identify themselves with (He et al., 2012).

In summary, this research is the first dedicated investigation into virtual brand identification and engagement in virtual gaming brand communities. Accordingly,

exploring the role of brand community identifications helps marketers to determine specific strategies for targeting third-level students within a virtual setting.

6.1.2 Hypothesis 2: Reward

The main objective of this hypothesis was to investigate the relationship between UGT-based reward and brand loyalty. After running the statistical analysis, the researcher found that the findings *support* the hypothesis that reward has a significant and positive affect on brand loyalty in VBCs. Consequently this aligns with previous findings, highlighting that rewards are key with regards to enhancing brand loyalty (Kaur et al., 2020, Islam and Rahman, 2017, Baldus et al., 2015). More specifically, hedonic rewards (strengthening pleasurable and emotional experience) display higher levels of agreement compared to the other types of benefits. Accordingly, the impact of the different types of benefits should be examined in more detail in future research which will be discussed in more detail in section 6.2.

Fundamentally, the study allowed the researcher to answer the second part of the research question: "the role of **reward** on brand loyalty in virtual gaming brand communities among third-level students." Therefore, it offered important insight into the motivations of virtual community members in a changing, high-level interactivity environment. Organisations should therefore pursue ways to enhance brand loyalty and raise rewards for consumers, taking into consideration the significant effect of both (Islam and Rahman, 2017).

6.1.3 Hypothesis 3: Consumer brand engagement

In addition to BCI and reward, the researcher also explored brand loyalty's role as an outcome of CBE (Vivek et al., 2012, Hollebeek et al., 2014, Gummerus et al., 2012, Brodie et al., 2013, Kaur et al., 2020). Previous research surrounding CBE focussed either on a quantitative research approach or a mixed-method approach (Baldus, et al., 2015). However, for the purpose of this study the author's main focus was quantitative research as quantitative research in the association of the researched constructs is lacking (Kaur et al., 2020, Brodie et al., 2013, Hollebeek, 2011). This allowed the researcher to provide a quantifiable answer to the last part of the research question: "the role of **consumer brand engagement** on brand loyalty in virtual gaming brand communities among third-level students."

After running the statistical analysis, the researcher found the findings *support* the hypothesis that consumer brand engagement has a significant and positive affect on brand loyalty in VBCs. This in turn aligns with previous research by Baldus et al., (2015), Hollebeek et al., (2014) Kaur et al. (2020) and Brodie et al. (2013). The analysis also reveals that the frequency of engagement in virtual brand communities does not impact brand loyalty. In other words, there was no significant difference between members who are active daily in contrast with members who are active weekly.

It is important to note that previous studies also researched the mediating effect of CBE. However, the purpose of this study was to focus on the three main constructs that influence brand loyalty for virtual gaming communities, and not so much on the possible mediating effect of CBE. Based on the findings of table 16, it is observed that CBE does indeed play a partial mediating role in the relationship between reward/BCI and brand loyalty. Even though all factors have a significant impact on brand loyalty, consumer brand engagement becomes less significant compared to brand community identification and reward when all factors are measured against one another.

The next section discusses important practical and theoretical implications that appeared from this research.

6.2 Limitations of the study

The set questions and variables selected to measure brand loyalty in this study can be considered as limited. Due to the complexity of the subject, the researcher was not able to include every aspect that has a potential influence on brand loyalty in VBCs. However, it is important to note that there are many other factors that must be addressed when analysing brand loyalty. Specifically, the different types of reward (social integrative, personal integrative, cognitive and hedonic benefits) that have a potentially significant impact on brand loyalty, should be examined in more detail.

Moreover, the research allowed global responses and did not focus on one specific geographic area which possibly impacts the findings. This is especially so as the sample size does not represent the countries that participated in the questionnaire as it is too

small to do so. Therefore, this element should be considered to better understand the topic and specific virtual setting.

As mentioned in section 4.8 Limitations, the method chosen can potentially be a limiting factor. A survey with close-ended questions might not provide the full in-depth view for which qualitative research could bring more specific insights, especially to better understand the driving factors and how they influence brand loyalty. However, for this particular study qualitative research was considered to be out of scope based on previous research used to replicate the findings. (Kaur et al., 2020, Islam and Rahman, 2017). Finally, the predetermined questionnaire could possibly be out of date and therefore it might impact the accuracy of the results. It is important to note that this is a possibility but not a certainty and should therefore be addressed. However, the limitations mentioned above are not considered to have a substantial impact on the overall research, as the main research objective was achieved.

6.3 Practical considerations

Fundamentally, the empirical results of this study provide additional insights towards the already existing research and literature on brand loyalty in virtual brand communities. As mentioned in section 6.1.1, previous research identified a positive effect of reward and brand identification on brand loyalty. Moreover, Kaur et al., (2020) focus primarily on the mediating effect of CBE, whereas this study focuses on the direct effect of the three factors combined. Therefore, the adoption of an integrative UGT/social identity theory perspective alongside consumer brand engagement complements prior findings and strengthens the theoretical claims of such theories in a specific social media context (virtual gaming brand community).

The findings not only offer insight geared towards marketing practitioners, but can also serve gaming companies with guidelines on how to shift focus to the right constructs in order to enhance brand loyalty with third-level students online. It is assumed that the functionality of virtual brand communities will advance in the following years, which provides new opportunities for marketers to not only increase two-way interactions but also allow consumers to earn rewards, receive credible information, and post feedback and reviews. Moreover, it allows organisations to develop and strengthen brand and organizational bonds given the amount of people that spend their time online.

Chapter VII: Conclusion and Recommendations

7.1 Conclusion

Brand loyalty has become a focus of interest for many researchers over the past few decades, due to the fact that people are choosing to spend more of their time online. Digital marketing practitioners experience new challenges for building relationships with consumers as the road to brand loyalty is not a one-way street. Virtual brand communities have been identified as an important setting to facilitate brand loyalty, which is often linked to brand community identification, reward and consumer brand engagement.

Despite the need to better understand brand loyalty within social media settings, empirical research is lagging behind. In response to the gap in research, this study aimed to understand the driving factors that play a significant role in generating brand loyalty in virtual brand communities. Upon the analysis of the data and statistically testing the hypothesis, the research question: *what is the role of brand community identification, reward and consumer brand engagement on brand loyalty in virtual gaming brand communities among third-level students?* was answered.

The author attempted to replicate the findings from prior research by Kaur et al., (2020) and Islam and Rahman (2017) on brand loyalty and provide insight into the drivers, dynamics, and outcomes. Generally, it is important to note that BCI, reward, and CBE have a significant and positive effect on brand loyalty. The study shows a clear connection between all three constructs, therefore rejecting the null hypotheses. However, when all variables are measured against one another, consumer engagement becomes less significant in comparison to brand community identification and reward. The results further reveal that students that are active on a daily basis do not have a significant impact on brand loyalty when compared to members that are active on a weekly basis, which is a significant finding.

It is suggested that gaming organisations and marketing practitioners could potentially utilise the findings surrounding the SIT-model alongside the UGT-reward model and CBE when offering a brand-hosted VBC. Especially when developing marketing

strategies, in order to influence the specific segment of third-level students. It enables marketers to build long-term brand loyalty and relationships. Accordingly, the focus should point towards commonalities, and links, and should fit between the brand and its community users to enable brand identification, claim the rewards, and engage in a two-way interaction.

Students are perceived to be a challenging consumer segment in building brand loyalty as they are often hard to reach. However, they are tech-savvy and continue to spend more time online which provides new opportunities for gaming brands to engage with this specific segment within virtual gaming brand communities. Therefore, to advance the understanding of this group, assessing what drives and engages them is the path to success.

7.2 Recommendations for future research avenues

Upon concluding the research and comprehending its limitations, the author defined recommendations and further research avenues. This research has particular limitations that create scope for future research, which are outlined below.

1. The study followed the **quantitative** research approach, which does not allow an in-depth analysis of the topic for which qualitative research could bring deeper insights. Specifically, a combination of both quantitative and qualitative research could bring valuable insights into students that are part of online gaming brand communities, by creating focus groups.

2. A significant factor of this research is that it focuses on **international data** and responses. Respondents were not limited to one geographic area, which has a direct impact on the results of this study. It is important to acknowledge this as cultural and socio-demographic attributes contribute towards various results, based on the respondent's country of residence. Moreover, it would be insightful testing the findings based on gender identification with a larger sample which would identify new opportunities to develop brand loyalty specifically for these groups.

3. Another important finding demonstrates that it would be interesting to learn more about the **platforms** these students use to engage in the community (e.g. Facebook groups). The aim of this study was focused on respondents who are active in virtual gaming brand communities, but did not specify which type of VBCs they were active on at that time. It would be important for marketers to identify which platforms and brands play an important role in generating and maintaining brand loyalty.

4. Finally, the author's aim was to investigate the three main variables that impact brand loyalty, which may not reflect the complete set of **characteristics**. Additional customer motivations within virtual brand communities should be explored and focus on customer engagement extensively. Accordingly, further research should also focus on other constructs like brand image, brand equity, brand attachment, and hybrid online/offline engagement. The latter would be of interest as the context for this study was narrowed down to virtual brand communities only, which does not include the dynamics of a hybrid context.

Reference list

Alnawas, I., Aburub, F. (2016) "The effect of benefits generated from interacting with branded mobile apps on consumer satisfaction and purchase intentions", *J. Retailing Consumer Serv.*, 31, pp. 313-322. https://doi.org/10.1016/j.jretconser.2016.04.004

Alonso Dos Santos, M., Guardia, F., Campos, C., Moreno F. and Ko, Y. (2018) "Engagement in sports virtual brand communities", *Journal of Business Research*, 89, pp. 273-279. https://doi.org/10.1016/j.jbusres.2017.12.053

Algesheimer, R., Dholakia, U. M. and Herrmann A.(2005) "The social influence of brand community: evidence from European car clubs", *J. Mark.*, 69, pp. 19-34. https://doi.org/10.1509/jmkg.69.3.19.66363

Ashley, C., Noble, S. M., Donthu, N. and Lemon, K. (2011) "Why customers won't relate: obstacles to relationship marketing engagement", *Journal of Business Research*, 64, pp. 749-756. https://doi.org/10.1016/j.jbusres.2010.07.006

Baldus, B.J., Voorhees, C. and Calantone, R. (2015) "Online brand community engagement: scale development and validation", *J. Bus. Res.*, 68, pp. 978-985. https://doi.org/10.1016/j.jbusres.2014.09.035

Bagozzi, R. P. and Dholakia U. M. (2002) "Intentional social action in virtual communities", *J. Interact. Mark.*, 16, pp. 2-21. https://doi.org/10.1002/dir.10006

Bijmolt, T., Leeflang, P., Block, F., Eisenbeiss, M., Hardie, B., Lemmens, A and Saffert, P. (2010) "Analytics for Customer Engagement", *Journal of Service Research*, 13(3), pp. 341-356. https://doi.org/10.1177/1094670510375603

Bhattacharya, C.B., Rao, H. and Glynn, M.A. (1995) "Understanding the bond of identification: an investigation of its correlates among art museum members*", J. Marketing*, 59(4), pp. 46-57. https://doi.org/10.1177/002224299505900404

Bhattacharya, C. B. and Sen, S. (2003) "Consumer–company identification: a framework for understanding consumers' relationships with companies", *J. Marketing*, 67(2), pp. 76-88. https://doi.org/10.1509/jmkg.67.2.76.18609

Blanche, M. T., Durrheim, K. and Painter, D. (2006) Research in Practice: Applied Methods for Social Science. 1st ed., Cape Town: University of Cape Town Press.

Blau, P.M. (1964), Exchange and Power in Social Life, John Wiley, New York, NY, No. 49.

Brewer, Marilyn B. (1991) "The Social Self: On Being the Same and Different at the Same Time," *Personality and Social Psychology Bulletin*, 17(5), 475–82. https://doi.org/10.1177/0146167291175001

Brodie, E., Ilic, A., Juric, B. and Hollebeek, L. (2013) "Consumer engagement in a virtual brand community: An exploratory analysis", *Journal of Business Research*, 66(1), pp. 105-114. https://doi.org/10.1016/j.jbusres.2011.07.029

Brogi, S. (2014) "Online brand communities: a literature review", *Social and Behavioral Sciences,* 109, pp. 385 – 389. https://doi.org/10.1016/j.sbspro.2013.12.477

Bryman, A. and Bell, E. (2015) Business Research Methods. 4th ed. Oxford: Oxford University Press.

Carbonaro, M. and Bainbridge, J. (2000) "Design and development of a process for web-based survey research", *The Alberta Journal of Educational Research,* 46(4), pp. 392-394.

Chang, A., Hsieh, S. H. and Tseng T. H. (2013) "Online brand community response to negative brand events: the role of group eWOM", *Internet Res*., 23(4), pp. 486-506. https://doi.org/10.1108/IntR-06-2012-0107

Coelho, P., Rita, P. and Santos, Z. (2018) "On the relationship between consumer-brand identification, brand community, and brand loyalty", *Journal of Retailing and Consumer Services,* 43, pp. 101-110. https://doi.org/10.1016/j.jretconser.2018.03.011

Creswell, J. D. and Creswell, W. J., (2017) Research design: *Qualitative, quantitative, and mixed methods approach.* 5th ed. SAGE Publications.

De Valck, K., Van Bruggen, G. H. and Wierenga, B. (2009) "Virtual communities: a marketing perspective", *Decis. Support Syst.*, 47(3), pp. 185-203. https://doi.org/10.1016/j.dss.2009.02.008

De Vries, N.J. and Carlson, J. (2014) "Examining the drivers and brand performance implications of customer engagement with brands in the social media environment", *J. Brand Manage*., 21(6), pp. 495-515. https://doi.org/10.1057/bm.2014.18

Dessart, L., Veloutsou, C. and Morgan-Thomas, A. (2015) "Consumer engagement in online brand communities: a social media perspective", *J. Prod. Brand Manag*., 24, pp. 28-42. https://doi.org/10.1108/JPBM-06-2014-0635

Dick, A. and Basu, K. (1994) "Customer loyalty: Toward an integrated conceptual framework",

Journal of the Academy of Marketing Science, 22(2), pp. 99-113.
https://doi.org/10.1177/0092070394222001

Doorn, V., Lemon, N., Mittal, V., Nass, S., Pick, D., Pirner, P. and Verhoef, P. C. (2010) "Customer engagement behaviour: theoretical foundations and research directions", *J. Serv. Res.,* 13(1), pp. 253-266. https://doi.org/10.1177/1094670510375599

Eelen, J., Özturan, P. and Verlegh, P. (2017) "The differential impact of brand loyalty on traditional and online word of mouth: The moderating roles of self-brand connection and the desire to help the brand", *International Journal of Research in Marketing*, 34(4), pp. 872-89. https://doi.org/10.1016/j.ijresmar.2017.08.002

Foroudi, P., Jin, Z., Gupta, S., Foroudi, M. -M. and Kitchen, J. -P. (2018) "Perceptional components of brand equity: Configuring the Symmetrical and Asymmetrical Paths to brand loyalty and brand purchase intention", *Journal of Business Research,* 89(1), pp, 462-474. https://doi.org/10.1016/j.jbusres.2018.01.031

Global Web Index, 2021 Global Web Index, 2021. How to reach millennials in 2021 (flagship report), London: Index.

Gummerus, J., Liljander, V., Weman, E. and Pihlström, M. (2012) "Customer engagement in a Facebook brand community" *Manage. Res. Rev.*, 35(9), pp. 857-877. https://doi.org/10.1108/01409171211256578

Habibi, M. R., Laroche, M. and Richard, M. O. (2014) "The roles of brand community and community engagement in building brand trust on social media", *Comput. Hum. Behav.*, 37, pp. 152-161. https://doi.org/10.1016/j.chb.2014.04.016

Haikel-Elsabeh, M. Zhao, Z., Ivens, B. and Brem;A. (2019) "When is brand content shared on Facebook? A field study on online word of mouth", *International Journal of Market Research*, 61(3), pp. 287-301. https://doi.org/10.1177/1470785318805301

Hennig, T., Gwinner, K. Walsch, G. and Gremler, D. (2004) "Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet?", *Journal of Interactive Marketing*, 18(1), pp. 38-52. https://doi.org/10.1002/dir.10073

Heath, M. T. P., and Tynan, C. (2010) 'Crafting a research proposal', *The Marketing Review,* 10(2), 147-168, Business Source Ultimate. https://doi.org/10.1362/146934710X505753

Hollebeek, L. (2011) "Exploring customer brand engagement: definition and themes", *J. Strategic Marketing*, 19(7), pp. 555-573. https://doi.org/10.1080/0965254X.2011.599493

 Hollebeek, L., Glynn, M. S. and Brodie R. J. (2014) "Consumer brand engagement in social media: conceptualization, scale development and validation", *J. Interactive Marketing,* 28(2), pp. 149-165. https://doi.org/10.1016/j.intmar.2013.12.002

Hollebeek, L.D. (2018), "Individual-level cultural consumer engagement styles: conceptualization, propositions, and implications", *International Marketing Review*, 35(1), pp. 42-71. https://doi.org/10.1108/IMR-07-2016-0140

Hollebeek, L., Srivastava, R. K. and Chen, T. (2019) "SD logic–informed customer engagement: integrative framework, revised fundamental propositions, and application to CRM", *J. Acad. Mark. Sci.*, 47(1), pp. 161-185. https://doi.org/10.1016/j.tele.2016.03.005

Islam G. (2014) Social Identity Theory. In: Teo T. (eds) Encyclopedia of Critical Psychology. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-5583-7_289

Islam, J. and Rahman, Z. (2017) "The impact of online brand community characteristics on customer engagement: An application of Stimulus-Organism-Response paradigm", *Telematics and Informatics,* 34(4), pp. 96-109. https://doi.org/10.1016/j.tele.2017.01.004

Jacoby, J. and Chestnut, R. W. (1978) Brand loyalty measurement and management Wiley, New York, NY

Jang, H., Olfman, L., Ko, I., Koh, J. and Kim, K. (2008) "The influence of on-line brand community characteristics on community commitment and brand loyalty", *Int. J. Electron. Commer.,* 12(3), pp. 57-80. https://doi.org/10.2753/JEC1086-4415120304

Kannan, P. K. and Li, A. (2017) "Digital marketing: A framework, review and research agenda", *International Journal of Research in Marketing*, 34(1), pp. 22-45. https://doi.org/10.1016/j.ijresmar.2016.11.006

Katz, E., Gurevitch, M., & Hass, H. (1973) "On the use of mass media for important things", *American Sociological Review*, 38, 164-181.

Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of Mass Communication by the Individual. In J. G. Blumler, & E. Katz (Eds.), The Uses of Mass Communications: Current Perspectives on Gratifications Research (pp. 19-31). Beverly Hills: Sage Publications.

Kaur, H., Paruthi, M., Islam, J. and Hollebeek, D. -L. (2020) "The role of brand community identification and reward on consumer brand engagement and brand loyalty

in virtual brand communities", *Telematics and Informatics,* 46(1), pp. 101321
https://doi.org/10.1016/j.tele.2019.101321

Labrecque, L. I. (2014) "Fostering consumer-brand relationships in social media environments: the role of parasocial interaction", *J. Interact. Mark*., 28, pp. 134-148. https://doi.org/10.1016/j.intmar.2013.12.003

Lam, S. K., Ahearne, M., Hu, Y. and Schillewaert, N. (2010) "Resistance to brand switching when a radically new brand is introduced: a social identity theory perspective." *J. Marketing*, 74(6), pp. 128-146. https://doi.org/10.1509/jmkg.74.6.128

Lamberton, C. and Stephen, A. -T. (2016) "A thematic exploration of digital, social media, and mobile marketing research's evolution from 2000 to 2015 and an agenda for future research" *Journal of Marketing*, 80, pp. 146-172.
https://doi.org/10.1509/jm.15.0415

Laroche, M., Habibi, M. R. and Richard, M. O. (2013) "To be or not to be in social media: how brand loyalty is affected by social media?", *Int. J. Inf. Manag.,* 33, pp. 76-82. https://doi.org/10.1016/j.ijinfomgt.2012.07.003

Laroche, M., Habibi, M. R., Richard, M. O. and Sankaranarayanan, R. (2012) "The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty", *Comput. Hum. Behav.*, 28, pp. 1755-1767, https://doi.org/10.1016/j.chb.2012.04.016

Lemon, K. N., & Verhoef, P. C. (2016) "Understanding customer experience throughout the customer journey", *Journal of Marketing*, 80(6), pp. 69–96.
https://doi.org/10.1509/jm.15.0420

Malthouse, E. C., Haenlein, M., Skiera, B.,Wege, E. and Zhang, M. (2013) "Managing customer relationships in the social media era: introducing the social CRM house" *J. Interact. Marketing*, 27(4), pp. 270-280. https://doi.org/10.1016/j.intmar.2013.09.008

McAlexander, J. H., Schouten, J. W. and Koenig, H. F. (2002) "Building brand community", *Journal of Marketing*, 66 (1), pp. 38-54.
https://doi.org/10.1509/jmkg.66.1.38.18451

Mousavi S., Roper S., Keeling K. (2016) Virtual Brand Communities: Pathways to Brand Trust?. In: Petruzzellis L., Winer R. (eds) Rediscovering the Essentiality of Marketing. Developments in Marketing Science: Proceedings of the Academy of Marketing Science. Springer, Cham. https://doi.org/10.1007/978-3-319-29877-1_120

MSI (2018) MSI – Marketing Science Institute, 2018. 2018–2020 Research Priorities. Cambridge, MA. Retrieved from https://www.msi.org/uploads/articles/MSI_RP18-20.pdf (Accessed on 9th of May 2021).

Muniz Jr., A. M., and O'Guinn, T. C. (2001) "Brand community." *Journal of Consumer Research*, 27(4), pp. 412–432. https://doi.org/10.1086/319618

Muntinga, D. G., Moorman, M. and Smit E. G. (2011) "Introducing COBRAs: exploring motivations for brand-related social media use", *Int. J. Advertising*, 30(1), pp. 13-46. https://doi.org/10.2501/IJA-30-1-013-046

Newman, I., Benz, C. R. and Ridenour, C. S. (1998) Qualitative-Quantitative *Research Methodology: Exploring the Interactive Continuum*, 1st ed., Carbondale and Edwardsville: Educational Leadership Faculty Publications.

Paruthi, M. and Kaur, H. (2017) "Scale development and validation for measuring online engagement", *J. Internet Commerce*, 16(2), pp. 127-147. https://doi.org/10.1080/15332861.2017.1299497

Phillips D. Philosophy, science, and social inquiry: contemporary methodological controversies in social science and related applied fields of research. Oxford, England : Pergamon Press; 1987.

Raïes, K., Mühlbacher, H. and Gavard-Perret, M. -L. (2015) "Consumption community commitment: Newbies' and longstanding members' brand engagement and loyalty", Journal of Business Research, 68(12), pp. 2634-2644. https://doi.org/10.1016/j.jbusres.2015.04.007

Rehman, A. A. and Alharthi, K. (2016) 'An introduction to research paradigms', International Journal of Educational Investigations, 3 (8), pp. 51-59. ISSN: 2410-3446.

Ruggiero, T. E. (2000) "Uses and Gratifications Theory in the 21st Century". *Mass Communication & Society.* Vol. 3(1), pp. 3-37.

Sánchez, B., Budtz-Jørgensen E., Ryan, L. and Hu, H. (2005) "Structural Equation Models: A Review with Applications to Environmental Epidemiology", *Journal of the American Statistical Association*, 100(472), pp. 1443-1455. Taylor & Francis, Ltd.

Saunders, M. and Lewis, P. & Thornhill, A. (2015) Research Methods for Business Students. 7th Edition, Pearson.

Saunders, M., Lewis, P. and Thornhill, A. (2007) Research Methods for Business Students. 4th Edition, Financial Times Prentice Hall, Edinburgh Gate, Harlow.

Saunders, Mark & Lewis, P. & Thornhill, A. (2009) Understanding research philosophies and approaches. Research Methods for Business Students, 4, pp. 106-135.

Simões, P., Rita, P. and Raposo, Z. (2018) "On the relationship between consumer-brand identification, brand community, and brand loyalty", *Journal of Retailing and Consumer Services,* 43(1), pp. 101-110. https://doi.org/10.1016/j.jretconser.2018.03.011

Stafford, T. F., Stafford, M. R., and Schkade, L. L. (2004) "Determining uses and gratifications for the Internet", *Decis. Sci.*, 35(2), pp. 259-288

Tajfel, H. and Turner, J. (1979) The social identity theory of intergroup behavior Stephen Worchel, William G. Austin (Eds.), Psychology of Intergroup Relations, Nelson-Hall, Chicago, pp. 33-47.

Taylor, S. J. and Bodgan, R., (1998), Introduction to Qualitative Research Methods: a Guidebook and Resource, 3rd edition, USA: John Wiley & Sons, Inc.

Trusov, M., Bucklin, R. and Pauwels, K. (2009) "Effects of Word-of-Mouth versus Traditional Marketing: Findings from an Internet Social Networking Site", *Journal of Marketing*, 73(5), pp. 90-102. https://doi.org/10.1509/jmkg.73.5.90

Introduction to regression with spss lesson 2: SPSS regression diagnostics. UCLA: Statistical Consulting Group. Available at: https://stats.idre.ucla.edu/spss/seminars/introduction-to-regression-with-spss/introreg-lesson2/#s7 [Accessed on 4th of June 2021]

Vivek, S. D., Beatty, S. E. and Morgan R. M. (2012)" Customer engagement: exploring customer relationships beyond purchase", *J. Marketing Theory Pract.*, 20(2), pp. 122-146. https://doi.org/10.2753/MTP1069-6679200201

Watson, G.F., Beck, J.T., Henderson, C.M. (2015) "Building, measuring, and profiting from customer loyalty", *Journal of the Academy of Marketing Science*, 43, pp. 790–825. https://doi.org/10.1007/s11747-015-0439-4

Wimmer, R. Dominick, J. (2013) Mass media research: An Introduction Wadsworth, Belmont, CA.

Winters, R., Winters A. and Ronald G. A. (2010) "Statistics: A Brief Overview", *Ochsner Journal*, 10(3), 213-216. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096219/ [Accessed 30 May 2021].

Winters, E. and Ha, S. (2012) "Consumer evaluation of customer loyalty programs: the role of customization in customer loyalty program involvement", *J. Global Scholars Marketing Sci.*, 22(1), pp. 370-385. https://doi.org/10.1080/21639159.2012.720752

Appendix

Thesis Submission Form
Submission of Thesis to Norma Smurfit Library,
National College of Ireland

Student name: Charlotte Callaert **Student number**: x19147414

**School:** National College of Ireland, School of Business **Course**: International Business

Degree to be awarded: Master of Science

Title of Thesis: The role of brand community identification, reward and consumer brand engagement on brand loyalty in virtual gaming brand communities among third-level students.

One hard bound copy of your thesis will be lodged in the Norma Smurfit Library and will be available for consultation. The electronic copy will be accessible in TRAP (http://trap.ncirl.ie/), the National College of Ireland's Institutional Repository. In accordance with normal academic library practice all theses lodged in the National College of Ireland Institutional Repository (TRAP) are made available on open access.

I agree to a hard bound copy of my thesis being available for consultation in the library. I also agree to an electronic copy of my thesis being made publicly available on the National College of Ireland's Institutional Repository TRAP.

Signature of Candidate: Charlotte Callaert, August 2021.
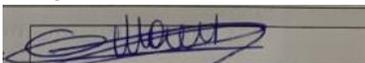
For completion by the School:

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Date:
This signed form must be appended to all hard bound and electronic copies of your thesis submitted to your school.

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