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ŽAIDYBINIŲ ELEMENTŲ IR PRISIRIŠIMO PRIE PREKĖS ŽENKLO ĮTAKA VARTOTOJŲ LOJALUMUI ĮMONEI BETPAWA GHANA	THE IMPACT OF GAMIFICATION AND BRAND ENGAGEMENT ON CUSTOMER LOYALTY TO BETPAWA GHANA
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INTRODUCTION

Customer/firm interactions are increasingly transpiring through digital channels. Consumers must overcome their fear of the unknown and accept change in order to get the most benefits from it, no matter how much they may like it. Several researchers (Dokić, Dokić, Jovanovi, and Radivojevic (2017) have said that the internet is a network of several computers that can exchange massive amounts of information. All of the things we could possibly desire are just a click away, and the whole world is at our fingers. It has heralded the beginning of a new age in global marketing, one in which there are no geographical boundaries or borders. A lot of people use internet to make buying and selling decisions, and it is projected that this trend will continue. The vast majority of the world's leading firms are making significant expenditures in Internet performance (marketing) in order to get closer to their consumers, present their goods, and hear what they have to say about them (Dokić et al, 2017). Because of its many capabilities, the Internet has emerged as the most crucial medium for new marketing strategies and new forms of trade, as well as the most effective avenue for increasing customer interactions and product validation. There's nothing quite like gamification to improve the user experience on the internet (Dokić et al, 2017).

We have profoundly changed our way of life as a result of the fast growth of technology and the widespread usage of the internet. Technology has grown vital in many fields, including business, education, healthcare, and entertainment. The availability of information and teaching on the internet has increased dramatically in recent years. As a consequence of this fast development, customers' expectations have been increased, making it more difficult for marketers to deliver on their promises of new solutions and outstanding value. Whenever they use a product or service, consumers become more aware of the product's appearance, utility, and even its sense of humor. These modifications have resulted in a design that is more focused with making people happy and amused than with making them feel comfortable (Hall & Toke, 2018). Many applications that effectively include game features have spawned a new trend: gamification, which has already established itself as a common practice in the industry (Yang, Asaad, & Dwivedi, 2017).

Following the introduction of gamification, it was projected that it would eventually become a fundamental part of companies' marketing and client loyalty efforts (Burke, 2012). The concept has been explored in the field of human-computer interface and design but is also considered an essential marketing tool. No secret exists that marketers feel that gamification may enhance

customer engagement or ultimately build loyalty intentions with their client base. Gamification is a term used to describe the process of engaging customers, enhancing employee performance, increasing utility, and reinforcing motivation. There are several uses for game-based learning which include the health sector; education and tourism destinations; and customer behavior; and numerous other situations (Hamari & Koivisto, 2015). Houtari and Hamari (2017) define gamification as the design that attempts to cause a positive experience as games influence user cognitive and behavioral processes. These processes remain a mystery to be accomplished. gamification can help marketers establish stronger ties with their customers. The ultimate goal of company-leading companies is to put in the effort to stimulate additional purchases from customers who are loyal to their brand (Hur, Ahn, & Kim, 2011). In the marketing field, gamification has been used to enhance the advertising performance (Terlutter and Capella, 2013), enhance brand value (Yang, Asaad & Dwivedi, 2017), and engage customers (Harwood and Garry, 2015; Sigala, 2015).

Brand loyalty can be described as the degree of allegiance a customer has or may have for a particular brand (Liu, Li, Mizerski, & Soh, 2012). Various channels and techniques are incorporated in ways to engage customers thus making brand loyalty an important and main result (Aksoy et al., 2013). According to Aksoy (2013), “loyal customers are more likely to undertake repeat purchases”. Therefore, most companies have directed lots of ideas and efforts to enhance customer loyalty. Repeat consumer purchases, pleasant word of mouth, and cross-selling are examples of these loyalty consequences. (Hur *et al.*, 2010; Verhoef *et al.*, 2002; Stokburger-Sauer, 2010).

Gaps in Literature

With our smartphones, computers, and other networked devices dominating our lives, each new day may bring us something new, something different, and something exciting. Gamification has been found to increase user motivation and engagement in a variety of settings. (Rapp, Hopfgartner, Hamari, Linehan, & Cena, 2019). In their study on user views of gamified services, Hamari and Koivisto (2015) discovered that users regarded them to be more helpful, fun, and successful in catching their attention. A great lot of study has been done as a consequence to highlight the advantages of gamification and the many ways in which it may engage and motivate customer to participate in various activities and induce loyalty decisions to a brand (Dwivedi, 2015; Dessart, Veloutsou, and Morgan-Thomas, 2015; Yang et al., 2017; Carvalho and Fernandes,

2018). Brand engagement begins to be successful in situation where customers are viewed as consistent and proactive. This could be as a result of the extent to which the customer enjoys patronizing the brand and the benefits the individual gains from using the brand. Brand engagement, therefore, points to the attention given to a particular brand by a customer (Hollebeek et al, 2019).

According to previous studies such as Yang et al. (2017) and Carvalho and Fernandes (2018), strong brand loyalty is established by building, developing, and maintaining relationships with customers. Also, research on customer engagement by scholars such as Islam & Rahman (2017) and Hollebeek, & Islam (2019) concluded that customer involvement does have an impact on customer loyalty to a specific brand. In response to the call of Xu et al. (2017) who emphasized the fact, that gamification is still in its infancy hence the need for empirical research finding on the impact of gamification in marketing are called for. Gamification and brand engagement have been used by BetPawa Ghana, as a current approach to the allegiance level of their customers.

There has been little research on the impact of gamification and brand engagement on the commitment level of customers of betting companies in Ghana. Therefore, this study sets in to discover empirical evidence on the impact of gamification and brand engagement on the loyalty of customers of BetPawa Ghana.

Aim of the Study

The aim of the study is to assess the impact of gamification and brand engagement on the loyalty of customers of betting companies in Ghana, a case study of BetPawa Ghana.

Objectives of the Study

To achieve the aim of the study, the following objectives were set:

To identify the benefits of adopting gamification in marketing within betting companies.

To examine the role gamification plays in brand engagement.

Examine the impacts of gamification and brand engagement on customer satisfaction.

To explore the influence of gamification on brand loyalty intentions.

Examine the influence of gamification and brand engagement on customer loyalty.

Significance of the Study

This study has a policy, academic, policy, and practical significance. The findings of this study will be of great importance to betting companies in Ghana especially, BetPawa Ghana, and future researchers. To betting companies, the findings of this study will help develop marketing strategies and brand engagement that will make their customers satisfied. The study will bring to light the importance of gamification and brand engagement and therefore, help them develop marketing strategies that will suit the type of customers they have.

For future researchers, this study will serve as a foundational study for studies to be built upon. Again, it will serve as reference material for students in this field.

Organization of the Study

The introductory part of this research introduced gamification, customer engagement and customer loyalty intentions, and analysed the problem associated with these variables which justifies the study. It also identified that there have been little and inadequate studies on this field in relation to betting companies. This led to the formulation and development of the objectives of the study.

The study is organized into three chapters. The first part, theoretical analysis, throws light on related studies previously conducted. Methodology of Empirical research, the second part talks all about the research methodology from the design to the ethical issues. it further gives the hypothesis and conceptual framework of the study. Details of the sampling techniques and the data analysis methods, validity, and reliability. The company profile of BetPawa Ghana is also given in this chapter. The third part presents the results obtained from data collection and also, gives the discussion of the results. It also includes the summary, conclusions and recommendations made by the researcher based on the findings.

1. THEORETICAL ANALYSIS OF THE IMPACT OF GAMIFICATION AND ENGAGEMENT OF LOYALTY

1.1 Gamification

1.1.1 Gamification: Conceptual Foundations

The term "gamification" was first used in 2002, although it wasn't widely accepted until 2010 (Steele, 2013). Gamification refers to the introduction of video game concepts in real-life situations (Deterding et al., 2011 pp. 1). It is still a new concept that has attracted attention from modern-day researchers and is still being defined by several schools of thoughts. The contemporary nature of business today has necessitated the use of game elements and concepts in diverse spheres of life with the aim of gaining attention of patronage (Mora et al., 2017). The sensation created by this phenomenon cannot be over-emphasized. It has become one the pillars of customer engagement in modern times and therefore an essential part of marketing and advertisement (Burke, 2014). Gamification is therefore not a game in itself but a source of encouragement to users or customers to continue patronage.

With regards to services marketing, Hamari and Huotari (2017) also argue that “gamification refers to the process of upgrading a service with affordances for gameful experiences in order to aid users' total value creation in order to assist users in their total value creation”. Words like “game” and “experience” resonates through the above definitions, indicating the fact that gamification has a lot to do with enhancing user experiences for the betterment of a product or a service.

The different definitions of gamification have been summarized in table 2.1 below:

Table 1.1 Key gamification definitions

Sources	Gamification
Deterding et al. (2011)	“The application of game design ideas to non-game settings”
Mora et al. (2017)	“A method for enhancing the user experience of a service or system by introducing game-like aspects into the design of the service or system”

Zichermann and Cunningham (2011) “The use of game ideas to non-gaming situations in order to provide more information.”

Hamari and Huotari (2017) “The process of upgrading a service with affordances for gameful experiences in order to aid users' total value creation in order to assist users in their total value creation”

Source: Author, 2022

Robson, Plangger, Kietzmann et al. (2015) discussed the roles of game designers, players and observers and also, three principles of gamification.

The researchers claim that two fundamental dimensions—variations in involvement and connection with the game's environment—can be used to represent all parties involved in gamified experiences. These dimensions were taken from Pine and Gilmore (1998). The participation of the game is characterized by the level to which an individual adds to the experience or is just partly engaged in it. The connection of the player is characterized by the type of relationship (absorption or immersion) with the game environment that brings the individual close to the experience. According to Robson et al. (2015), the absorption relationship uncovers the experience before the individual and occupy the mind. Immersion relationship on the other hand integrates the individual as part of the experience.

The scholars argue that there are four types of individuals involved in gamified experiences: designers, players, observers and spectators. These individuals have varying level of engagement in the experience. They describe designers as the people who make the decisions in the organization who design and develop, manage and maintain the gamified experience. The designers are highly engaged in setting up the experience but become passive when the experience begins. The players are those involved in the competition of the gamified experiences (Robson et al., 2015). They are highly involved because they are the real performers and can be external or internal to the organization.

The observers are the external individuals who not actively engaged in the gamified experience and therefore enticed by the gamified experience. They do not affect the gamified experience directly unlike the players who do. Though, they do not have direct impact, popularity of the

experience is dependent on the number of observers (Robson et al., 2015). Observers are potential player as their role can change. In a non-game setting, observers do not have direct link with the players but have knowledge about the gamified experience and can therefore, follow the results. Finally, individuals who are not directly in the competition but their presence affects the operation of the gamified experience (Robson et al., 2015). They are part of the environment of the gamified experience and are therefore immersed in the experience.

This literature review looks at three principles of gamification: mechanics, dynamics and aesthetics.

Mechanics include all the decisions that the designers make to define the rules, goals, setting, interaction types, context and the boundaries of the condition to be gamified. Robson et al. (2015) argue that the mechanics are known before the gamified experience begins and they do not change but remain constant throughout. This simply mean that they do not vary per player but stay the same each time a player is involved with the experience (Robson et al., 2015). In the theory of organizational control, mechanics is equivalent to the technology and the systems that management use to achieve the desired results and behaviours (McCarthy and Gordon, 2011). Robson et al. (2015) discovered that there are 3 types of mechanics: setup mechanics, rule mechanics, and progression mechanics.

Rule mechanics signifies the goals and he concepts of the gamified experience to be followed. They determine the actions that allowed and therefore, provide the limitations and constraints in order to build pressure on the players (Kelly, 2012). Setup mechanics focuses on the environment of the gamified experience which includes the items needed, the setting, the distribution of the items among players (Robson et al., 2015). Progression mechanics define the various instruments that designers include in the design and development process to affect the gamified experience (Kelly, 2012).

In summary, mechanics are the building blocks of the gamified experience and determine the players, their interaction, the rules, the structure, the motivations of the gamified experience.

Dynamics are all the behaviors of the player that come forth as a result of participation in the gamified experience. The dynamics are not determined by the designer but are determined by how players follow the mechanics set by the designer (Lewicki, Barry and Saunders, 2014). Mechanics

like team-based player structure can result to a dynamic like joint operation whereas, an individual player structure can result to a dynamic like competition. Beyond the player structure, observers and spectators have influence on the player dynamics (Lewicki et al., 2014). For example, players tend to compete fiercely as they know they are being watched.

It is very difficult to guess the types of dynamics that will emerge and this can lead to unintended results and attitudes which may or may not be good. This is because, designers do not have any knowledge of what will happen after the mechanics have been set. It is therefore a big challenge unto designers to make sure the appropriate mechanics are set.

Emotions are the psychological feelings aroused when a player engages in a gamified experience. Emotions are the results of how players follow the mechanics and then create the dynamics of the gamified experience. The motivations to have a continuous participation in the gamified experience is dependent on the emotions that are created. Individuals would always participate if they enjoy the experience (Robson et al., 2015).

One of the many applications of gamification is the utilization of games and game design elements to address real-world problems such as puzzle games and ‘spelling bee’ games. In general, there are three forms of gamification: conquering hunger, performing time-consuming tasks, and incorporating gamification into the professional environment. As shown by these real-world examples, gamification may be used in a range of situations and situations.

Nick Pelling created the term "gamification" in 2002, but it wasn't until about 2010 that it started to gain momentum in academic circles, according to Pelling (Liu, Santhanam, & Webster, 2017). Since 1982, the concept of gamification and its antecedents have piqued the curiosity of a wide range of individuals. With the goal of gaining a better understanding of why computer games were so successful, Thomas Malone investigated how game qualities might be infused with non-game interfaces with a similar degree of success as they were applied to games (Malone, 1982). Malone (1982) came to the conclusion that non-game interfaces may be made more successful and attractive by including elements such as challenge, fantasy, many levels of complexity, and productive and compelling metaphor into the design.

It is also possible to look at gamification from the perspective of what it accomplishes rather than the material from which it is fabricated or constructed. In other words, it is not limited to only the

aesthetics of the game and the fun associated with it but the lessons which can be learned and applied in real-life situations and how they can complement modern-day business practices. The term "gamification" is used by these researchers to describe game-based service systems that offer user feedback and engagement mechanisms in order to support and promote the user's complete value production process. (Huotari & Hamari, 2011).

Customer satisfaction is a gauge of how well the goods, services, and overall experience live up to the client's demands and expectations (Gupta, 2021). Mostly abbreviated as CSAT, is also defined as the gap between what a customer expects from a product or service and how it actually performs. (Hutcheson & Moutinho, 1998). Customer Loyalty is a measure of the likelihood of a customer repeatedly purchasing the goods and services of an organization (SendPulse, n.d.). This means that customer loyalty is an ongoing relationship between a customer and an organization as a result of the organization meeting expectations of the service being provided. Customer satisfaction, benefits, loyalty, and engagement may all be improved via the usage of gamification due to the countless benefits of gamification and also because the rationale behind this study highlights the fact that gamification has a lot to offer modern-day business practices to enhance customer perceived value and engagement. Due to the fact that gamified experiences such as those offered by Facebook, can influence behavior and encourage desired actions (Blohm and Leimeister, 2013), numerous companies have adopted the practice in order to increase their customer motivation, improve performances at work settings, encourage healthy lifestyles, and morally boost students and teachers to learn (Deloitte, 2013).

However, there is a growing corpus of study that investigates the negative ramifications and abuses of the gamification technique as well as the positive effects of the method. An in-depth literature review was undertaken by the researchers Hyrynsalmi, Kimppa, and Smed (2017) in order to get a better understanding of how game-based learning influences workers. They observed that if game elements are used to induce desired behavior, they may be unethical, hazardous, or addicting if they are used in an improper manner (Hyrynsalmi, Kimppa, & Smed, 2017). Amazingly, there are no critical viewpoints on gamification's negative side effects, such as demotivation, that have been expressed. It is important to be aware of both the benefits and limitations of this viewpoint (Leclercq, Poncin, & Hammedi 2018; Rapp, Hopfgartner, Hamari, Linehan, & Cena, 2019).

1.1.2 The Elements of a Game

It is important to note that gamification design strongly depends on game features (Deterding, et al, 2011). A game's design characteristics include visual representations of feedback, points, rankings, or badges (a special reward given to a player who has met a goal within the game experience) that are shown in a specific setting and have the ability to evolve via the accumulation of multiple stages and accomplishments (Mekler, Brühlmann, Tuch, and Opwis, 2017).

As part of the system's fundamental components, users may earn points by accomplishing certain activities and tasks, which are one of the most important aspects of the system. They are often used as a motivating tool to help people accomplish their goals and attain higher levels of performance (Sailer, Mayr, Hense, & Mandl, 2017). Given that achieved points are uncomplicated to compute, people will have an easier time maintaining a record of their own progress. Points are an excellent tool for soliciting player feedback, which is an essential component of any well-designed game (Hall & Toke, 2018).

Badges, according to Werbach and Hunter (2012), are a graphic depiction of achievement attained via participation in a gamified procedure. Earning badges is a terrific way to demonstrate your originality while also demonstrating your dedication. In certain cases, badges have been demonstrated to be a useful technique for enhancing user engagement and motivating users to take on more difficult activities in order to get the recognition they want (Hamari, Koivisto and Sarsa, 2014). Obtaining badges may also serve as a symbol of membership to a certain social group, which comes with its own set of benefits and obligations (Werbach & Hunter, 2012).

Managing the stages and successes is accomplished via the use of graphs and feedback that is shown on a progress bar. They keep track of the player's development throughout time, focusing on emphasizing the good improvements that have occurred. According to motivation theory, this element promotes the development of a mastery orientation (Sailer et al, 2017).

On the basis of their accomplishments, players are assigned a position on a leaderboard. In the majority of situations, it is a graph comparing the achievements of participants in a competition or a list organizing them in order of some criteria, such as the total number of points they have accrued throughout the competition. There has been substantial debate over the usefulness of leaderboards as a motivational element for users in the last several years. It is possible to move to the next level

by accumulating a small number of points on a leaderboard; however, creating social pressure could have a negative effect on users who rank the least. In a competitive environment, the effectiveness of this feature is more likely to be achieved when the rivals are on an equal playing field. Users may get discouraged as a consequence of this, and the outcome may be bad, which may deter them from participating actively in the process (Sailer et al, 2017). Another common gaming element is the use of avatars, which are characters created by the user. This component may be found in a broad variety of applications and web services, among other places. User-created avatars are the default, and they enable players to adopt or develop their own identities while also expressing themselves within the framework of the game's environment (Sailer et al, 2017).

The game's narrative context refers to the stories that are told in the background and is an optional element. When it comes to game success, the narrative context has nothing to do with it; it merely serves to give the game some personality or importance, like when a story is presented in the background of a central activity. It is likely that this is a feature of augmented reality that helps to stimulate particular activities, such as running, by displaying relevant information (Deterding et al, 2011; Sailer et al, 2017).

People's actions and behaviors are determined by their amount of motivation, which is an instinctual need that motivates action and affects their actions and behaviors. Persons who are motivated are those that have a certain goal or achievement in mind, while uninspired individuals are those who do not have this drive or motivation in their lives (Deci & Ryan, 2000). Because motivation differs from person to person, it is hard to make broad generalizations about it. Additionally, individuals are driven by a number of factors in addition to having varied amounts of motivation. When people make the decision to learn a new language, they may be motivated by the potential of learning new talents, as well as the prospect of earning a good grade or earning bonus points as a result of their efforts (Deci & Ryan, 2000).

Gamification is a technique that businesses employ to influence their consumers. In their eyes, it all comes down to getting people enthused about the job that they do and assisting them in achieving their goals. Many of these observations are backed up by research (Liu et al, 2017; Hamari & Koivisto, 2015). Gamification is a technique that firms may adopt to communicate with their consumers on a more personal level and inspire them to accomplish their goals (Robson, Kietzmann, Plangger, McCarthy, & Pitt, 2015).

In order to achieve positive emotional outcomes, it is important to activate motivational systems using effective gamification techniques. It is useful to use gamified services to foster positive emotional results and the formation of habits that lead to recurring activities. As a consequence, it seems that long-term engagement and consumption are habits that develop with time (Robson et al, 2015).

When thinking about gamification, it is crucial to look at the research on technology adoption and usage. Services and systems have been divided into two major groups in the literature on technology adoption, depending on their intended use and the tasks that they are expected to accomplish. Services and systems are classified into two broad categories based on their intended use and the tasks that they are expected to perform. It is possible to distinguish between two sorts of services: those that assist in the achievement of external goals and those that do not. They are regarded as solely utilitarian (Davis, 1989; van der Heijden, 2004). In contrast, hedonic services are those that are provided for the sake of enjoyment and fun (van der Heijden, 2004). According to Hamari and Koivisto (2015), the benefits associated with devotion to pleasure and ability to function usefully influence motivation and engagement, therefore, making it an efficient tool for marketing.

Companies are constantly looking for new ways to excite and engage their stakeholders, which may include consumers, employees, or students. By incorporating mechanics from the gaming industry, firms may be able to create an environment that can inspire and engage individuals in non-gaming environments (Robson et al., 2015).

1.1.3 Benefits of Gamification

Gamification provides a number of advantages for companies, ranging from increased output to increased competitiveness and everything in between. Below are some benefits organizations gain from implementing a gamification program

Enhancing motivation

The use of gamification in the workplace is becoming more popular, as seen by the implementation of numerous incentive schemes. Employees are expected to achieve a set of goals, which is implied by the term. If the task is completed successfully, the employee is offered a prize. Employees'

productivity, job satisfaction, and general motivation all improve as a result of being properly rewarded (Desai and Nagaraju, 2018).

Increasing the effectiveness of operations

Greater motivation is directly related to increased productivity. Workplaces gain from gamification efforts because they encourage a more laid-back and cooperative attitude among their employees. Employees' abilities may also be polished via the usage of video games, according to the company. As a result, there is an increase in production (Desai and Nagaraju, 2018).

Creating an environment that fosters creativity

When employees participate in enjoyable activities, they are more inclined to think and act in a creative manner. Engagement and inventiveness among employees may both be boosted via the use of game-based activities (Desai and Nagaraju, 2018).

Increasing the effectiveness of internal communications

When it comes to gamification initiatives, employees from a number of departments are often involved. Participation in games helps to promote internal communication across departments, which in turn helps to improve collaboration and productivity. The feedback that human resource managers get from employees also contributes to the improvement of communication between human resource departments and other departments (Desai and Nagaraju, 2018).

Creating a pleasant work atmosphere is important.

Employing gamification in training has been shown to boost employee loyalty to the organization. When workers participate in game-based learning, it is easier for them to identify with the business and to feel like they are a part of a team (Desai and Nagaraju, 2018).

Introduction of new ideas

The use of gamification in the workplace makes it simpler to encourage the development of fresh ideas. They think that playing games may assist individuals in learning new skills and improving their overall well-being, both professionally and personally. If the project is directed by a group of

persons who are both highly skilled and innovative, it has a better chance of success (Desai and Nagaraju, 2018).

Gaining knowledge of a certain set of talents

If a company want to assist its workers in the development of certain qualities, such as leadership, stress management, or communication, it may choose to include gamification into its training programs (Desai and Nagaraju, 2018).

Taking up the role of a company's brand ambassador

Game-based programs are utilized to convey the company's image to present and prospective employees in this case. Using gamified activities to promote the company's image makes it easier for recruiters to find new workers, which helps to reduce turnover. The workplace has become more efficient in terms of communication (Desai and Nagaraju, 2018). Companies that maintain regular touch with their employees are better able to explain the current state of things and prospective future directions to their employees. The fact that workers know they can depend on management to preserve their data means that they are more conscious of the importance of their jobs as a result (Desai and Nagaraju, 2018).

1.2 Loyalty

Loyalty is a major trait that may be analysed from several angles, and various academics may have different definitions for the concept.

While deterministic holds the belief that loyalty is the result of the effects of external causes, stochastic holds the belief that customers exhibit random behaviour and their purchase behaviours would not necessarily be affected by prior ones (Huang, 2017).

Despite being provocative to discuss, the second viewpoint ignores the cognitive processes that influence how customers develop loyalty to a particular brand (Jacoby & Chestnut, 1978).

According to Aaker (1991), a customer's brand loyalty can be thought of as an indication of their level of attachment to the company. Brand loyalty is regarded as a sincere commitment by customers to keep buying or favouring particular goods or services, as agreed upon and shared by Jackson (2006). Customers could be affected by internal and external circumstances that have an impact on their purchase behaviour, but they wouldn't stop using the same items and services.

Anderson & Jacobsen (2000, p. 65) provided another definition of this term, stating that brand loyalty is the result of consumers participating in a process started by a company that "creates benefit for a customer such that they would retain or increase their purchases from the organization." Customer loyalty is apparently essential for any company, regardless of its line of business, to achieve sustained success and to thrive in its industry; therefore, improving customers' value to keep them is as necessary as reaching out to more potential consumers.

1.3 Customer Engagement

Customer engagement is a word used to describe the behaviour, psychological, and emotions of consumers which drives a connection with an organization in ways other than simply making a purchase of products or services from them. (Hollebeek et al. 2014).

Table 1.2 Key Customer Engagement Definitions

Sources	Customer Engagement
Patterson et al. (2006)	“The level of a customer’s physical, cognitive, and emotional presence in their relationship with a service organization”.
Bowden 2009a)	“A psychological process that models the underlying mechanisms by which customer loyalty forms for new customers of a service brand as well as the mechanisms by which loyalty may be maintained for repeat purchase customers of a service brand”.
Vivek, Beatty, and Morgan (2010)	“The intensity of an individual’s participation & connection with the organization’s offerings & activities initiated by either the customer or the organization”

- Van Doorn et al. (2010) “Customers’ behavioral manifestation toward a brand or firm, beyond purchase, resulting from motivational drivers such as word-of mouth activity, recommendations, helping other customers, blogging, writing reviews”
- Hollebeek (2011) “The level of a customer’s motivational, brand-related and context-dependent state of mind characterized by specific levels of cognitive, emotional, and behavioral activity in a brand interaction

Customer Engagement is an ongoing and long-term interactions between an organization and its customers (Hollebeek et al., 2019). It can also be seen as the customer resource investment (emotional, psychological or physical) in the interactions of the organization (Pansari and Kumar, 2017).

The idea of customer engagement, according to Kumar et al. (2010), is inadequate if it does not incorporate consumer purchases. If you're a lover of sports cars but don't have the financial means to purchase one, you can still learn about the brand's history, characteristics, and other aspects of the vehicle by doing some research. Regardless of the fact that this person is not now a customer, there is a possibility that he or she may become one in the future. It is possible that word of mouth will assist a firm in recognizing the value of its clients even before they make a purchase. The act of making a purchase is not required for consumers to become involved; nonetheless, van Doorn et al. (2010) consider it to be an engagement action. Leave reviews, inquire about product specifics, sign up for loyalty programs, and even just like a company's Facebook page are all excellent methods to demonstrate your support for the company you patronize.

1.4 Satisfaction

Pizam and Ellis (1999) suggest that the phenomenon of satisfaction is not universal. It's conceivable that various consumer organizations may use various standards to assess a particular good, service, or experience. These vary based on the situation and environment, especially when it comes to a customer's

subjective assessment of their interaction (Eccles& Durand, 1997). Satisfaction may result from a fairly straightforward or intricate procedure involving numerous cognitive, affective, and other unstudied psychological and physiological processes (Oh & Parks, 1997). Alternatively, social or environmental factors may have an impact. There are many definitions of the concept of consumer satisfaction as a result of its diversity and complexity. The table below lists many definitions of customer pleasure put forth by various academics.

Table 1.3 Customer Satisfaction Definition

Sources	Satisfaction
Hughes (1991)	“A multifaceted concept, primarily determined by visitors’ attitudes both before and after.”
Chadee and Mattsson (1996)	“A cognitive evaluation of the attributes the consumer attaches to the service.”
Oliver (1997)	“The consumer’s fulfillment response. It is a judgement that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including the levels of under-or-over fulfillmentt.”

According to some definitions, customer satisfaction is the result of their interaction with a product, good, or service (Vavra, 1997). This final element could be a cognitive reward state, an emotional reaction to an experience, or a comparison of rewards and costs to the expected outcomes (Howard & Sheth, 1969: Churchill & Surprenant, 1982: Westbrook & Reilly, 1983)

1.5 Customer Perceived Value

Value has various meanings. To some, value simply mean, price and to others, it means benefit or worth of something. Customer value is the perception of the merit of a product or a service compared to the possible options (Mahajan, 2020). Worth used in this context means whether the customer feels there has been benefits gained from the product or service over the cost of the product or service. When it comes to assessing the amount of value that a product or service may deliver, there is no specific formula to follow which is customer value is equal to benefits minus

cost of product/service (Mahajan, 2020). An upshot of this is that various buyers will set different values on the same item (Anderson & Narus, 1998) because they gain different number of benefits.

Benefits include the quality of the service or product, the brand name of the product or the producer, experiences and success one gains using the product or service (Mahajan, 2020). It should be noted that consumers are different from customers. Consumers do not buy the product or service but use the product/service. On the other hand, customer is an individual who makes a decision to buy or buys the product or service (Mahajan, 2020).

Business market value is the monetary equivalent of the technological, economic, service, and social advantages that a client company obtains in exchange for the cost of a market offering. (Anderson & Narus, 1998).

The benefits and importance of customer value cannot be overlooked especially in the field of marketing. A major reason why customer value is important is because it can enhance the satisfaction of the customer (Mahajan, 2020). Customers always compare the cost of the product to the benefits they will obtain before purchasing a product. Customer value can also lead to customer loyalty, therefore, elevating the position of the organization to another level. Creating customer value will again, increase the customer experience (Mahajan, 2020).

1.6 Perceived Quality

The entire superiority that prompts people to purchase a product is known as perceived quality (Aaker and Jacobson, 1994). Quality qualities like colour, flavour, or appearance can affect how well something is perceived, claim Bernués et al. (2003). Customers' requirements and satisfaction as well as favourable impressions of the quality of the services are the starting point for perceived quality. One step is to provide customers with high-quality services that are both efficient and effective (Shandra & Murwatiningsih, 2016). This is crucial because, according to Farida (2014), consumers will evaluate the products and services they have purchased after they have paid for them. This evaluation will include two categories: contentment and discontent.

1.7 The interface of Gamification, Brand Engagement, and Loyalty

1.7.1 Brand Engagement as an Antecedent of Loyalty

Buying a product or service isn't the only thing that customers do when it comes to their brands nowadays. It is known as consumer brand engagement, and it is projected to play a key part in

creating more involving interactions with consumers, such as those between businesses and their customers. (Dessart et al., 2015). Repeated interactions with a business that increases the customer's investment in their brand and company are hallmarks of customer engagement (Hollebeek et al., 2014). So, it may be more accurate than standard conceptions like quality or satisfaction that do not effectively describe the depth of consumer–brand interactions that are founded on trust and loyalty (Hollebeek, 2011).

A recent shift in academic concentration toward a broader, relational orientation has led to a growing emphasis on the need of building interactive customer–brand interactions in the branding literature (2014; Hollebeek et al., 2014; Vivek et al., 2014). There is a growing body of evidence showing that customer brand engagement is more thorough than conventional measures of brand trust, experience, and love (Dwivedi, 2015).

According to a conceptual study, consumer brand participation may help customers to become more loyal to the brand since it generates positive thoughts about the firm. Recent studies (Brodie et al., 2011; Hollebeek 2011, Vivek et al., 2012) show that customers who engage with a brand in this manner are more likely to return and advocate for the company in the long run (Vivek et al., 2012; Dwivedi, 2015). Customers' interactions with brands affect their loyalty, according to a research finding conducted by So et al. Brand loyalty and other loyalty-related outcomes are improved when customers actively connect on social media, as shown by studies by Jahn and Kunz (2012), Dessart (2017), and Carvalho and Fernandez (2018), among others.

1.7.2 Gamification in the Context of Loyalty Building

Marketing, healthcare, and education have all used gamification in recent years, with the purpose of improving consumer loyalty and engagement, inspiring staff, and altering people's behaviors. Loyalty systems that rely on persuasion, such as credit cards and frequent flier programs, are similar in that the user's behavior is influenced without any forced change.

Gamification has also been demonstrated to have an influence on consumer loyalty to a firm, according to empirical studies (Yang et al., 2017). Gamification and customer brand engagement were shown to have just a weak connection in Lithuania, according to their studies. The emotional and cognitive features of gamified interactions, which are highly engaging and optimally tough, have been proven to be positively connected with brand engagement in further study.

There is a clear correlation between customer loyalty and brand engagement. Customers who actively provide feedback on products or services strengthen the bond between a company and its clients (Chen et al., 2011; Hoseini, 2013). Gamification may have a negative influence on customer loyalty. Other customer-focused strategies customer acquisition and retention may be used in conjunction with these marketing efforts to further strengthen consumer commitment to the brand.

1.7.3 Specificity of Loyalty to Betting Companies

Betting industry is one of the fastest-growing and most important industry in the world due to its ability to make people get money. With the rise of highly trained individuals in a highly competitive market, betting companies has become even more important in both developed and emerging nations for corporate management as well as for economic success. These betting companies seek to attract new consumers and retaining existing ones. According to statistics, the betting companies through online betting made a gross revenue of 16.5 billion in Europe alone in the year 2016 (European Gaming and Betting Association, 2016). The normalization of online sports betting has operated in parallel to its legislation in many countries around the globe I the mid-2000s. the legal status of online betting has increased its customers because of the increasing number of operators providing the service (Lopez-Gonzalez, Guerrero-Sole ,and Griffiths, 2018). The economic impact of betting companies can't be overstated, especially in developing economies like Ghana. Since the establishment of the first betting company, many betting companies have been established (Fuillou-Landreat, Gallopel-Morvan, Lever et al., 2021).

Customer retention is a vital factor in a betting company's long-term success and profitability. The quality of a betting company's customer service has also been connected to client loyalty (Lopez-Gonzalez et al., 2018). In the betting industry, customers are more likely to cling to the betting company that gives more odds so that their wins could be huge. The establishment and maintenance of long-term client connections is a top goal for betting organizations (Lopez-Gonzalez et al., 2018). Consumers' trust in betting companies is still understudied (and so understudied) in most research on customer loyalty (Fuillou-Landreat et al., 2021).

1.7.4 Elements of gamification presently used by Betpawa

A gamified system comprises visual representations of feedback, points, rankings, or badges. This visual representation is given to a player as a form of reward for accumulating points attributed to

various accomplishments within a gaming experience (Mekler, Brühlmann, Tuch, and Opwis, 2017).

BetPawa as a betting company has adopted points, ranking and leader boards, and badges in its system of operation. They have incorporated additional gamification elements into the traditional betting experience. These games attached to their system foster customer engagement with the brand to enjoy other benefits the company provides. They are accessible to all once a customer has signed up for their services. BetPawa adopts the use of point accumulation in its system. Once a customer has accumulated enough points, he or she gains a badge which is attributed to enjoying some premium services offered by the company. Betpawa has another point accumulation strategy and bonus payout as 'Pawaboost'. This increases the opportunity for customers to bet with a small amount of money and win big. Alternatively, the customer also could exchange these points for additional cash during pay out or keep this monetary reward in their betting account wallet for future bets. A leader board is created within these games as it helps to boost engagement, motivation, and competition among customers within its customer base. They do this to influence customers to stay committed to their goals and attain higher levels of performance as they slowly move up or down the leader board. Customers with higher scores and activity in both betting and game involvement are ranked with either a platinum, gold, silver, or bronze crown, and this is displayed on their personal account profile.

1.8 Chapter Summary

In this chapter, the concept of gamification was discussed in section 1.2 with the definition of the term in section 1.2.1, the conceptual foundations in section 1.2.2, and the elements of a game in section 1.2.3. The concepts of loyalty and customer engagement were also discussed in sections 1.2 and 1.3 respectively. 1.4 ,1.5 and 1.6 discussed customer satisfaction and customer perceived value and perceive quality respectively. The theoretical analysis of the relation between Gamification, brand engagement and loyalty were also discussed in section 1.7 which included brand engagement as an antecedent of loyalty in session 1.7.1, gamification in the context of loyalty building in section 1.7.2, specificity of loyalty to betting service brands in section 1.7.3. 1.7.4 discussed the elements of gamification used in BetPawa. This chapter leads to the next 2.0 which will talk about the methodology of empirical research.

2. METHODOLOGY OF EMPIRICAL RESEARCH

2.1 Model and Hypotheses

In conjunction with earlier research by Yang et al. (2017) and Carvalho and Fernandes (2018), cultivating and preserving relationships with customers is the key to fostering high brand loyalty. Additionally, studies on customer engagement conducted by academics like Islam & Rahman (2017) and Hollebeek, & Islam (2019) found a correlation between customer involvement and brand loyalty. Based on this, the model below was created to achieve the objective of this empirical research, which was to evaluate the effect of gamification and brand engagement on the loyalty of clients of betting companies in Ghana, using BetPawa Ghana as a case.

The model consists of all the various variables interacting with each other on different levels. In the model gamification serves as the moderating variable while satisfaction acts as the mediating variable. Perceived value and quality, brand engagement, the mediator and the moderator all interact seek the outcome which is loyalty.

The figure below depicts the pictorial structure of the research model.

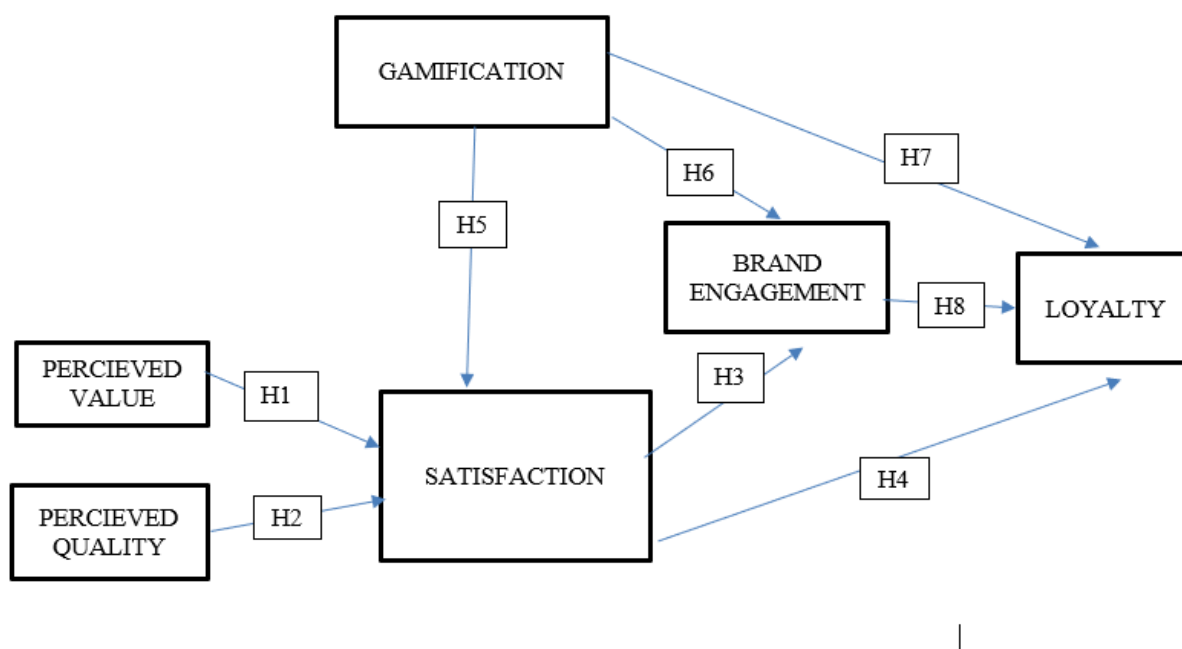


Figure 1 Research Model

Source: Author, 2022

The first of the linkages created in this conceptual model is between consumer-perceived value & quality and satisfaction. Consumer perceived value and perceived quality have been shown to have a significant impact on customer satisfaction in prior studies. Satisfaction is mostly the

outcome of a service provided by a company's product and services. (Vavra, 1997). In satisfactory service tends to create a positive perception in the mind of a customer. That is why Kuo et al. (2009) stated that customers will be more satisfied if service providers can give them with perceived greater service quality. In value-added services provided by an organisation, he looked at the links between service quality, perceived value, and customer happiness. Customer satisfaction and perceived value were both positively influenced by service quality, showing that when businesses deliver high-quality customer service, both metrics can improve.

H1: Perceived value exerts a positive effect on customer satisfaction.

H2: Perceived product quality exerts a positive effect on customer satisfaction.

Customer satisfaction can be defined as a feeling that manifest itself within a customer when the customer evaluates the results of purchasing a commodity or a product and compares it to actual perception and expectation derived from the product (Vasić, Kilibarda, & Kaurin, 2019). Pandey et al., 2020 also stated that "Customer satisfaction is a customer's cumulative experience based on all of his or her previous experiences with a good or service as determined by post-hoc evaluation of consuming experience." ". Previous studies made by Zaid & Patwayati, 2021 revealed that there is a direct relationship between customer engagement and customer satisfaction in their study on how much impact CS is impacted on CE in the case of Indonesian e-retailing markets. Results indicated that there is a direct and positive linkage between customer engagement and customer satisfaction, and vice versa Hence this established linkage supports the hypothesis that;

H3: Satisfaction has a positive effect on a brand engagement

Most firms base their company values on customer-centric values, emphasizing the necessity of staying true to the brand and communicating what the brand has to offer its customers on a regular basis. For organizations like the gambling industry, loyalty is a critical component of a successful business plan (Otseva, 2017). Several studies (Aymar & Joseph, 2019) have discovered how satisfaction and loyalty to a reputable restaurant chain services in Morocco, it was shown that the two factors are interconnected; customer satisfaction impacts brand loyalty and brand loyalty influences customer satisfaction.

Brand loyalty is strongly connected with increases in consumer satisfaction according to (Aymar & Joseph, 2019) and it is on this basis that we hypothesize that

H4: Satisfaction does positively impact loyalty.

Gamification, as discussed in the previous chapter, offers a variety of benefits to businesses, ranging from greater productivity to increased competitiveness and everything in between. According to Desai and Nagaraju(2018), most organizations benefit from establishing a gamification program, enhancing motivation, increasing the productivity of operations, fostering an environment that stimulates creativity, and improving the effectiveness of internal communications are just a few of the advantages of gamification. Bringing one of the benefits, motivation, to the fore. People's actions and behaviors are dictated by their level of motivation, which is an instinctive desire that drives action and influences people's actions and behaviors, which is why gamification design is so important. The addition of a game element has been found to improve consumers' long-term relationship outcomes, such as customer loyalty as per the finding of Dholakia, 2006. Gamification's effect on loyalty has also been demonstrated by defining the importance of buyers' incentive to play the game, as well as their overall enjoyment and satisfaction with the purchasing process (Bauer et al. 2020). Therefore, we hypothesize that:

H5: Gamification does have a positive effect on satisfaction.

Customers that desire to interact with a company, corporation, or brand in ways more than just buying products or services use the term "customer engagement." (Van Doorn et al. 2010). In a few empirical studies, gamification has also been demonstrated to affect brand engagement. As mentioned in the previous chapter, in the Lithuanian market, the influence of gamification on customer brand engagement was assessed (Gatautis et al. (2016)., however, their empirical findings suggested that the association was not strong. Immersion-based gamification, on the other hand, appears to be favourably connected with emotional brand engagement. Achievement-related characteristics, on the other hand, are frequently linked to a more cognitive approach, as well as goal-driven involvement and conduct. Leaderboards, badges, missions, and other features linked to achievement are some of the attributes that may not be enough to keep customers engaged. Based on this, we hypothesize that:

H6: Gamification has a weak impact on brand engagement.

Businesses use gamification to increase customer loyalty intentions, receive good feedback, and promote participation, according to current empirical study (Leclercq, Poncin, & Hammadi, 2017). Brand connections are facilitated by games that include elements designed to interact with the player. This is due to the fact that these kinds of games tend to elicit brand loyalty if the user chooses to play them (Berger et al., 2018). This study hypothesizes that gamification will serve as a mechanism for increasing loyalty. Previous research has shown that loyalty events and programs that include a gamification component increase consumer loyalty. (Hwang & Choi, 2019). Therefore, based on this

H7: Gamification exerts a positive impact on loyalty.

Consumers who interact with a brand develop a bond with it and develop some type of positive attachment to it. Their behaviour reflects this experience, as proven by display of devotion and passion to the company (Dwivedi 2015). This is visible when customers display loyalty behaviours like repurchasing, avoiding choosing other brands or switching brands, and sharing positive word-of-mouth. Researchers such as Loureiro, 2012 have noticed that customer engagement have a direct impact on loyalty intentions In view of this, we hypothesize that:

H8: Brand engagement exerts a positive impact on loyalty.

2.2 Research Instrument
The data for this study will be gathered from the field by using a structured questionnaire to ask participants for information in order to analyze the stated objectives. This will be an online questionnaire made up of closed-ended questions. Online data will be employed using tablets with these questionnaires. The questionnaire will facilitate the generation of reliable and valid data from a high proportion of the population within a reasonable period. At the same time, it is cheaper and more flexible using a questionnaire as it could provide accurate information. The questionnaire will be developed in English and some jargon that is best understood by our respondents. Data will be collected from three cities namely Accra, Kumasi, and Sekondi-Takoradi. These cities have higher population sizes and very active BetPawa retail shops. Respondents will fill it in at any time without disclosing their personal information. In order to ensure the validity and dependability of the data, the survey's anonymity enables the collection of more sincere responses. The questionnaire will be constructed based on previous research scales of measurement by researchers who have worked on the selected variables of this study

2.2 Sampling and data collection

This study will use the quantitative approach in this research. The quantitative research method is a credible and trusted method of making conclusions on results which paves way for the emergence of new hypotheses or disproving old ones (Bloomfield and Fisher, 2019). This method will make analysis fast and easy and cost-effective Goertzen (2017). It is also standardized and allows for the repetition of similar research studies in different settings and even with time with the development in comparing results. (Brown ,2015). In previous research in relation to gamification and various engagement interactions, researchers such as Hsu et al (2018), Yang et al (2017) used this research approach to provide various empirical results. In addition, a descriptive survey research approach will capture the thoughts, attitudes, perceptions, and experiences of respondents. This strategy permits data to be collected to test hypotheses or to address questions about the current status of the subject being studied (Creswell, 2013).

BetPawa Ghana customers exclusively made up the research population from which the sample was chosen. Because of the high customer base of BetPawa, an offline survey method will be employed in collecting data. In other to make sure the right respondents are chosen for this research, respondents who use the various BetPawa retail shops will be selected. Three cities (Accra, Kumasi, and Sekondi-Takoradi) will be selected because they have the greatest population and they are urban centers where money people try all sorts of means to make money including gambling online on sports. For this reason, convenience sampling will be used to choose respondents from these three major cities in Ghana. In so doing, in order to determine the sample size for this research, Cochran's formula will be used.

Cochran's formula (Cochran, 1954).

$$N = \frac{Z^2 PQ}{E^2}$$

E= margin of error

P = estimated proportion of the population

$$q = 1 - P$$

Z = confidence level on Z table

The estimated margin of error is 0.5

P is a 95% confidence level

$$q = 1 - 0.95 = 0.5$$

$$Z = 1.96$$

$$\begin{aligned} \text{Hence } N &= (1.96 (5) \div 0.5) ^2 \\ &= (19.6) ^2 \\ &= 384.16 \text{ approx. } \mathbf{384 \text{ respondents}} \end{aligned}$$

From the above calculation, 384 participants in total will be selected from the three major cities, i.e., 128 respondents from each city. Data collection will be done with the retail shops in these three major cities. The process of collection, distribution, collection and distributing is explained in the next section. For our respondents to be able to give their views and thoughts about the perceived value of services provided by BetPawa, the scale was constructed by Özkan et al (2019). will be employed. This scale contained 3 statements with a Cronbach alpha value of $\alpha = 0.80$. A seven-point Likert scale will be adopted which ranges from 1 to 7, with 1 meaning Strongly Disagree and 7 meaning Strongly Agree. Some keywords in the scale's statement will be adjusted to suit this research work.

Furthermore, in order to determine the perceived quality of services provided by BetPawa, Hsu, & Chen. (2018) scale was adapted with a Cronbach alpha value of $\alpha = 0.86$. This scale construct consists of four statements that represent the perceived value of a brand's website's user experience. Some keywords will be modified to suit the various parameters of this study. A seven-point Likert scale will be employed with a scale ranging from 1 to 7, with 1 meaning Strongly Disagree and 7 meaning Strongly Agree.

The above statements will be grouped as perceptions of quality and service and it will be illustrated in the first section titled Section A.

The gamification affects loyalty will be covered in Section B. The reliability score for the Conaway & Garay (2014) scale was 0.91. This scale, which has eight statements, rates how gamification elements a website has implemented and how it impacted loyalty. There were two sections on the scale. Survey questions in the first segment asked about respondents' relationship to the company and the reward system. Because it was irrelevant to the research being done, this portion was omitted. For this research project, the second subsection, which was particularly essential, was used. This construct will be modified to suit this research on how gaming systems used at

BetPawa's retail shops influence loyalty. This will be rated on a scale of 1 to 7, with 1 denoting a strong disagreement and 7 denoting a strong agreement.

The third section labeled Section C will cover the opinions of the customers on how gamification impacts their engagement with BetPawa. In view of this, Xi & Hamari (2020) will be adopted. This scale consists of three blocks of brand engagement, namely the emotional dimension, psychological/ cognitive dimension, and social dimension. This scale is well constructed and has been used in most studies concerning gamification and brand engagement. The Cronbach value of each block is 0.881, 0.812, and 0.853 respectively. Each block contains 5 statements based on these 3 dimensions. Responses will be rated on a seven-point Likert scale, with 1 denoting a strong disagreement and 7 denoting a strong agreement.

The fourth which is section D seeks to find the opinions of the customers on the impact of gamification on brand satisfaction. The scale developed by Liao et al. (2011) will be utilized to determine how the gamification instrument (i.e., the betting machine in retail stores) affects or influences brand satisfaction. This scale consists of 4 statements with Cronbach's alpha equal to 0.97. Responses will be rated on a seven-point Likert scale, with 1 denoting a strong disagreement and 7 denoting a strong agreement. Also. It is also important to also determine the customer's satisfaction with the brand BetPawa, Shi et al (2014) scale will be chosen. This scale consists of 3 statements with Cronbach alpha values to be equal to 0.87. Ratings will range from 1 to 7, with 7 representing a strong agreement and 1 indicating a strong disagreement.

Section E will gather data on the impact of gamification on the customer's loyalty intentions to stay with the brand. To determine the impact of gamification instruments (i.e., the betting machine in retail stores) on the customer's loyalty intentions to stay with the brand, the scale of Hsu, & Chen, (2018) will be chosen. The scale contains 6 statements slightly modified to suit this research work. Cronbach alpha for this scale is 0.88. A seven-point Likert scale will be employed with a scale ranging from 1 to 7, with 1 meaning Strongly Disagree and 7 meaning Strongly Agree.

Lastly, Section F will comprise the respondent information which will include the gender, age, and educational level.

All 7 variables used in the current study, along with a description of the construct questions, a description of the adopted measurement scale, and references. See Annex 2

Some of the information used in this study will come from secondary sources, such as journals, textbooks, reports, and published literature, including on the internet, in order to ensure that primary data collection will be pertinent, accurate, current, and unbiased.

3.0 ANALYSIS OF EMPIRICAL DATA

3.1 Sociodemographic characteristics of respondents

The anticipated sample size was 384 for the study. Out of 384, 300 respondents filled the questionnaire. 243 respondents used Betpawa services at least once within the last 3 months. Hence 243 responses were accepted for further part of the research. Therefore, out of the to 243 respondents (94.7.0%) were males and 5.3% were females. This result revealed that males participated in the use of betting and gaming platforms as compared to females. This is depicted in the figure below.

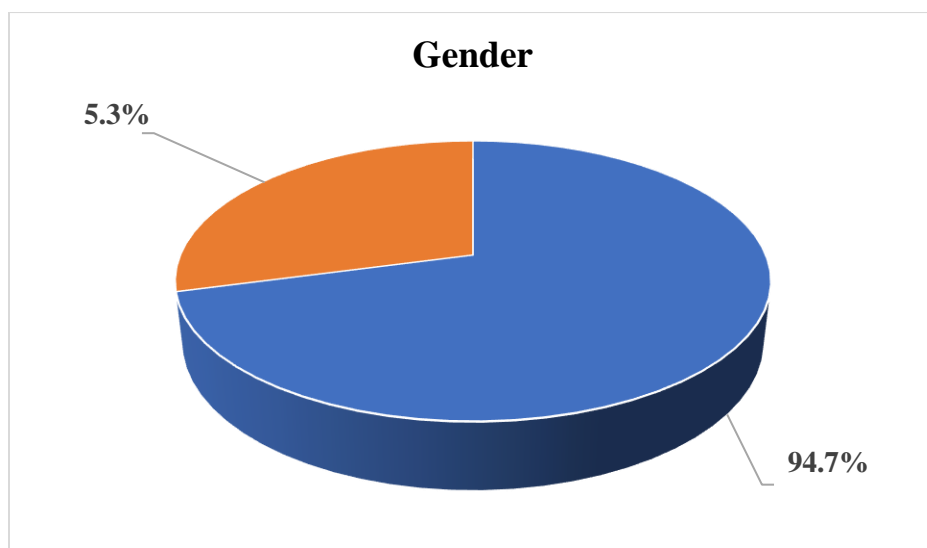


Figure 2 A Pie Chart of the Gender of the respondents

The ages of the respondent ranged from 18 to 35. The minimum age was 18 and the maximum age was 35. The mean age was 26.06 with a standard deviation of 4.189. Ages were grouped into three (i.e., 18 -24, 25-29 and 30 and above). The legal age for using this betting service in Ghana is 1yearsar hence chosen age category above. The majority of the respondents 123 making up 50.60% were between the ages of 25 and 29. 33% (82 respondents) were between the ages of 18 and 25 making the second majority of the respondents and 15.6% represented the rest of the total chosen population. This result is shown in the figure below:

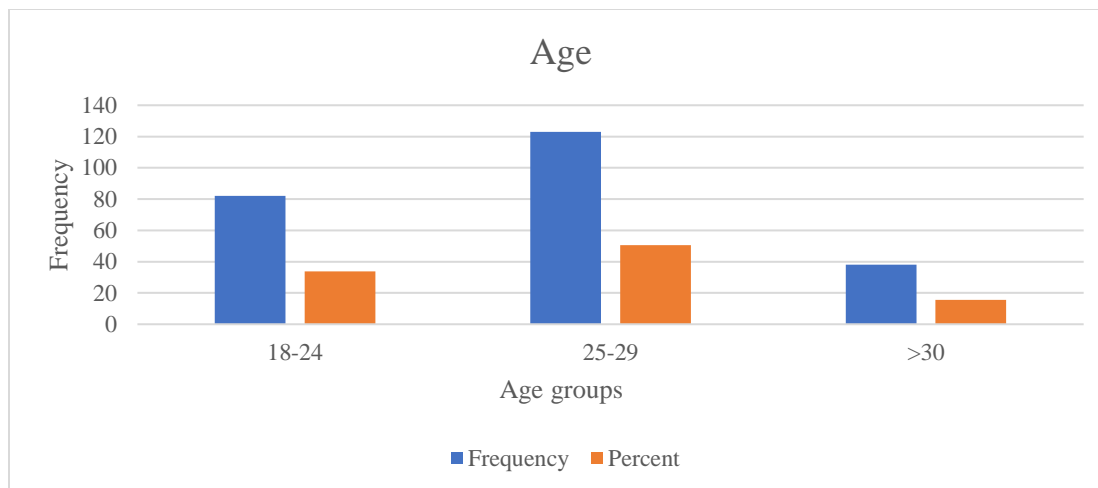


Figure 3 Age distribution of respondents

With regards to the educational level, the majority of the respondents had their educational level up to the Secondary stage forming 45.7 % of the entire population sample and 44.9% forming the 2nd majority with an educational level up to tertiary. This result confirms the observation made by (Aragay, 2021) that most of the youth with secondary and mostly tertiary are more likely to engage with betting companies hence the high rate of betting addiction within this educational level category. The figure below depicts the result;

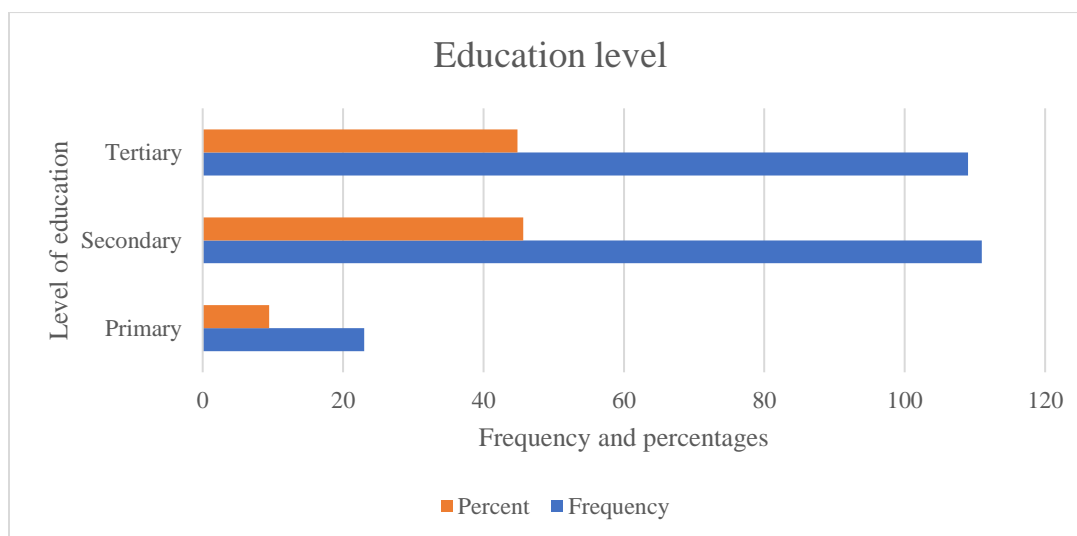


Figure 4 Education level of respondents

3.2 Reliability of Scales

The study's constructs' internal consistency is gauged by their reliability. If a construct's Alpha (α) value is higher than .70, it is considered dependable (Hair et al., 2013). Cronbach's Alpha was employed to evaluate the construct's reliability. There were seven variables in total. The results revealed that the Loyalty scale with six items ($\alpha = .974$), and satisfaction with seven items ($\alpha = .960$) were found reliable. More so, perceive value had three items with ($\alpha = .860$). However, the third item was deleted hence living two items that improve the overall reliability test result to ($\alpha = .890$). On the other hand, perceived quality had four items with reliability ($\alpha = .920$). Similar to the perceived value, one item was deleted resulting in an α value ($\alpha = .925$) with three items. Brand engagement with fifteen items was also found reliable ($\alpha = .977$). Lastly, gamification with four items had reliability ($\alpha = .966$)

Reliability results are summarized in the table:

Table 3.1 Reliability Test for all the variables

Construct	Number of Items	Cronbach's Alpha (α)
Loyalty	6	.974
Satisfaction	7	.960
Perceived Value	2	.890
Perceived Quality	3	.925
Brand engagement	15	.977
Gamification	4	.966

3.3 Means for all variables

Table 3.2 Table of means for all variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Perceived value	243	1.00	6.50	3.8313	1.46809
Perceived quality	243	1.00	6.50	3.9835	1.58301
Gamification	243	1.00	6.50	4.0370	1.40235
Brand engagement	243	1.00	6.40	4.0735	1.30988
Satisfaction	243	1.00	6.71	4.2598	1.35750
Loyalty	243	1.00	6.17	4.2668	1.46775

This table shows some descriptive statistics for the variables called Perceived value, Perceived quality, Gamification, Brand engagement, Satisfaction and Loyalty in a sample of 243 individuals. The statistics provided include the number of observations (N), the minimum and maximum values, the mean, and the standard deviation.

The mean values for all the variables, Perceived value, Perceived quality, Gamification, Brand engagement, Satisfaction and Loyalty, are all above 3.83, indicating that the participants in the sample generally had a positive perception of the product or service. The standard deviation for all variables are ranging between 1.40235 and 1.58301, indicating that the data is widely spread.

3.4 General Perception of Betpawa services

Respondents who had used Betpawa at least once in the last three months expressed their general opinions about the services provided by the company. Their opinions were ranked on a liker scale between 1 and 7. 1 meaning strongly disagree and 7 meaning strongly agree. About a quarter of respondents somewhat disagree that the company prioritizes customer benefits. A similar proportion (25.6%) do not think that the company exceeds customer expectations with the least proportion (4.1%) strongly agreeing that the company exceeds their expectations.

The mean responses for the three indicators are 3.90, 3.77, and 3.93 respectively. This suggests that respondents neither disagree nor agree that the customer's benefits are a priority for the company, exceeding customer expectations, and rendering quality services as the most distinguishing feature. Thus, the general perception of Betpawa is neutral.

Table 3.3 General Perception of Betpawa services

Variable	Percent %
The general perception about Betpawa	
Customer benefits are at the forefront	
1-strongly disagree	4.1
2-disagree	14.0
3-somewhat disagree	26.7
4-neither agree or disagree	16.5
5-somewhat agree	20.6
6-agree	18.1
7- strongly agree	0.0
Exceeds customer expectations	
1-strongly disagree	2.9
2-disagree	25.1
3-somewhat disagree	21.8
4-neither agree nor disagree	18.5
5-somewhat agree	13.2
6-agree	11.5
7- strongly agree	7.0
Quality service	
1-strongly disagree	5.3
2-disagree	16.9
3-somewhat disagree	21.4
4-neither agree nor disagree	14.8
5-somewhat agree	21.8
6-agree	17.3
7- strongly agree	2.5

3.4.1 Perception about Betpawa services

Respondents' perceptions of services offered by Betpawa were assessed based on the perceived value of the services, level of satisfaction, how well the machines have been designed and how good their award systems are. About a third of respondents who have ever used Betpawa somewhat disagree that Betpawa offers valuable services to its customers, a quarter of them disagree that the services are not satisfactory enough, and a similar proportion agree that the machines are well-designed. More so, 24.3% somewhat agree that Betpawa has a good award system.

The mean responses for the four indicators are 3.63, 3.66, 4.00, and 3.97 respectively. This suggests that the average respondents neither disagree nor agree that the Betpawa services are valuable, satisfactory, and offered via well-designed machines have a good award system. Thus, the general perception of Betpawa services is neutral.

Table 3.4 Perception of Betpawa Services

Variable	Percent
Valuable services	
1-strongly disagree	3.3
2-disagree	21.0
3-somewhat disagree	30.0
4-neither agree nor disagree	15.2
5-somewhat agree	16.5
6-agree	14.0
7- strongly agree	0.0
Satisfactory service	
1-strongly disagree	2.9
2-disagree	23.9
3-somewhat disagree	22.2
4-neither agree nor disagree	21.4
5-somewhat agree	14.8
6-agree	14.8
7- strongly agree	0.0
Well-designed machines	
1-strongly disagree	4.1
2-disagree	21.8
3-somewhat disagree	16.0
4-neither agree nor disagree	11.1
5-somewhat agree	22.2
6-agree	24.7
7- strongly agree	0.0
Good award system	
1-strongly disagree	4.9
2-disagree	22.2
3-somewhat disagree	11.5
4-neither agree nor disagree	17.3
5-somewhat agree	24.3
6-agree	15.6
7- strongly agree	4.1

3.4.2 Gamification effects on Betpawa services

To ascertain respondents' feelings about the company's gamification system, four indicators were used; the opportunity to earn benefits, earn extra points, feeling of being the best, and time to have fun. About 26.3% of the respondents felt Betpawa offered a chance to earn benefits, 20.6% neither agree nor disagree that could earn extra points, 26.3% somewhat disagree that they felt superior, and 26.7% somewhat agreed that they had a lot of fun time with Betpawa's rewards system.

The average responses for the four indicators i.e., opportunity to earn benefits, earn extra points, feeling of being the best, and time to have fun are 3.99, 3.92, 4.14, and 3.99 respectively. This indicates that, on average, respondents do not dispute or agree that Betpawa's reward systems provide a chance to gain benefits, additional points, a sense of superiority, and time to have fun. As a result, the popular perception of Betpawa's services is indifferent.

Table 3.5 Gamification effects on Betpawa services

Variable	Percent
Opportunity to earn benefits	
1-strongly disagree	3.3
2-disagree	11.1
3-somewhat disagree	26.3
4-neither agree or disagree	20.6
5-somewhat agree	20.2
6-agree	18.5
7- strongly agree	0.0
Extra points	
1-strongly disagree	3.7
2-disagree	16.5
3-somewhat disagree	16.5
4-neither agree or disagree	26.3
5-somewhat agree	18.5
6-agree	15.6
7- strongly agree	2.9
Feeling of being the best	
1-strongly disagree	3.3
2-disagree	10.3
3-somewhat disagree	27.2
4-neither agree or disagree	13.6
5-somewhat agree	23.0
6-agree	17.7

7- strongly agree 4.9

Fun time

1-strongly disagree	4.1
2-disagree	14.4
3-somewhat disagree	17.3
4-neither agree or disagree	21.4
5-somewhat agree	26.7
6-agree	14.0
7- strongly agree	2.1

3.4.3 Brand Engagement Dimension of Betpawa gaming machines

Respondents' thoughts about Betpawa devices were assessed using different indicators. About 26.3% were excited about using Betpawa machines. However, the mean for this response was 4.19 suggesting that on average, respondents had a neutral feeling about using Betpawa machines when measured on their feelings of excitement. About a third of them were heavily interested in the brand with and mean score of 4.0 suggesting neutrality on the level of interest. Thirty-one percent of the respondents somewhat agree that they felt passionate about the brand yet the means score for this was 4.08. About a quarter of the respondents were enthusiastic about the brand. However, the mean score for the level of enthusiasm for brand usage was 4.07. Regarding love for the brand, the majority (21.8%) somewhat agree that they loved the brand despite the mean score of 4.03 suggesting some level of indifference on average among participants.

Table 3.6 Brand Engagement Dimension of Betpawa

Variable	Percent
Feeling toward Betpawa gaming machine	2.9
1-strongly disagree	
2-disagree	7.4
3-somewhat disagree	26.3
4-neither agree nor disagree	19.8
5-somewhat agree	21.8
6-agree	18.9
7- strongly agree	2.9
Heavily interested in the brand	
1-strongly disagree	3.7
2-disagree	15.2
3-somewhat disagree	18.9
4-either agree or disagree	18.4
5-somewhat agree	25.8
6-agree	18.0
7- strongly agree	0.0

Passionate	
1-strongly disagree	3.3
2-disagree	17.7
3-somewhat disagree	13.6
4-neither agree or disagree	17.7
5-somewhat agree	31.3
6-agree	14.0
7- strongly agree	2.5
Enthusiastic	
1-strongly disagree	3.3
2-disagree	22.6
3-somewhat disagree	4.5
4-neither agree or disagree	28.8
5-somewhat agree	21.8
6-agree	12.3
7- strongly agree	6.6
Love for the brand	
1-strongly disagree	5.8
2-disagree	13.6
3-somewhat disagree	17.7
4-neither agree or disagree	20.6
5-somewhat agree	21.8
6-agree	18.1
7- strongly agree	2.5

3.4.4 Gamification effects on loyalty to Betpawa

Respondents were asked about how loyal they were to Betpawa as a result of their gaming machine. They were assessed using different indicators. About 25.1% agreed they will never go to betting machines of other companies to obtain points to be cashed out. 21% somewhat agreed to the loyalty claim while 20.6% were neutral about the claim. However, the mean for this affirmative response was 4.25 suggesting that on average, respondents would choose the Betpawa gaming machine over that of their companies. About 26.3 % agreed and consider themselves loyal to the company while 23% somewhat agree with the claim. In addition, 30.6% out of the total population with a mean of 4.39 agreed that most of their peers have identified their extreme preference or loyal to Betpawa gaming machines and over other service providers. This result complements the fun aspect of gamification with 26.7% of respondents somewhat agreeing that they have fun spending time at BetPawa gaming centers and the good reward system associated with the use of this gaming machine. Therefore, the total affirmation to loyalty of the brand does

not pertain to gamification itself but what value will be obtained particularly in the form of incentives. In this case, gamification doesn't have a strong effect on customer loyalty.

Table 3.7 Gamification effects on loyalty to Betpawa

Variable	Percent %
Gamification effects on loyalty to Betpawa	
Preference of Betpawa over other companies	
1-strongly disagree	2.9
2-disagree	17.7
3-somewhat disagree	12.8
4-neither agree or disagree	20.6
5-somewhat agree	21.0
6-agree	25.1
7- strongly agree	0.0
Loyalty claims to Betpawa	
1-strongly disagree	3.7
2-disagree	11.9
3-somewhat disagree	20.6
4-neither agree or disagree	11.5
5-somewhat agree	23.0
6-agree	26.3
7- strongly agree	2.9
Preference to use Betpawa gaming machine among peers	
1-strongly disagree	2.9
2-disagree	18.1
3-somewhat disagree	10.7
4-neither agree or disagree	13.6
5-somewhat agree	19.3
6-agree	30.9
7- strongly agree	4.5
Fun time	
1-strongly disagree	4.1
2-disagree	14.4
3-somewhat disagree	17.3
4-neither agree or disagree	21.4
5-somewhat agree	26.7

6-agree	14.0
7- strongly agree	2.1

3.4.5 Gamification effects on customer satisfaction

Respondents were asked to express how satisfied they were with the Betpawa gaming machine. About 26.3% and 22.6% agreed and somewhat agreed respectively to the fact that they feel satisfied with the overall experience using the Betpawa machine in the betting centers. However, the mean for this affirmative response was 4.28. About 33.3%, 37.4%, and 25.1% somewhat agreed to feel pleasure, content, and delightfulness respectively in terms of satisfaction towards Betpawa gaming machines. Hence, this is evident in the result pertaining to the engagement level above. The result expresses how much gamification may contribute to customer satisfaction.

Table 3.8 Gamification effects on customer satisfaction

Variable	Percent
Pleasure	
1-strongly disagree	0.8
2-disagree	17.7
3-somewhat disagree	13.2
4-neither agree or disagree	18.9
5-somewhat agree	33.3
6-agree	7.4
7- strongly agree	8.6
Content	
1-strongly disagree	3.7
2-disagree	9.9
3-somewhat disagree	16.5
4-neither agree or disagree	14.8
5-somewhat agree	37.4
6-agree	9.9
7- strongly agree	7.8
	3.7
Delightfulness	
1-strongly disagree	2.5
2-disagree	3.7
3-somewhat disagree	24.3
4-neither agree nor disagree	17.7
5-somewhat agree	25.1
6-agree	23.5
7- strongly agree	3.3
Overall satisfaction	

1-strongly disagree	2.9
2-disagree	11.1
3-somewhat disagree	16.5
4-neither agree nor disagree	20.6
5-somewhat agree	22.6
6-agree	26.3
7- strongly agree	0.0

3.5 Test of Hypotheses

The study seeks to the impact of gamification and brand engagement on customer loyalty to Betpawa Ghana. The following hypotheses were proposed.

Multiple regression was used to test the hypotheses. Three variables were tested simultaneously with satisfaction. Satisfaction was regressed on predicting variables of perceived value, perceived quality, and gamification. Perceived value, perceived quality, and gamification significantly predict satisfaction, $F(3, 239) = 151.551$, $p < .001$, which indicates that multiple regression is suitable for the test of the hypothesis.

Moreover, the $R^2 = 0.655$ depicts that the model explains 65.5% of the variance in satisfaction. See Annex 3

Table 1 shows the summary of the findings.

Table 3.9 Multiple regression analysis Perceive Value, Perceived Quality, Gamification on Satisfaction

Hypothesis	Regression Weight	Std.Error	β	t	p-value	Result
	(Constant)	B=1.106	0.159		t =6.973	Sig= 0.000
H1	PV-SAT	0.068	0.217	2.938	004	Supported
H2	PQ-SAT	0.056	0.329	5.068	000	Supported
H5	GAMI-SAT	0.079	0.323	3.980	000	Supported

*Note. *p < 0.05 PV: Perceived Value, PQ: Perceived Quality, SAT: Satisfaction β - Standardized Coefficient,*

H1 evaluates whether customer-perceived value exerts a positive effect on satisfaction. The results revealed that perceived value has a significant and positive impact on satisfaction ($\beta = .217$, $t = 2.938$, $p = 0.004$). Hence, H1 was supported.

Also, H2 evaluates whether customer-perceived quality exerts a positive effect on customer satisfaction. The results show that perceived quality has a significant and positive impact on satisfaction ($\beta = 0.329$, $t = 5.068$, $p = 0.000$). Hence, H2 was supported

More so, H5 will affirm whether gamification exerts a positive effect on satisfaction. The results ($\beta = 0.323$, $t = 3.980$, $p = 0.000$). confirm that gamification has a significant and positive impact on satisfaction. H5 is supported

Secondly, Satisfaction and gamification were tested simultaneously with brand engagement using multiple regression. Brand engagement was regressed on predictors of gamification and satisfaction. Satisfaction and gamification significantly predict brand engagement, $F(2, 240) = 607.509$, $p < .001$, which indicates that multiple regression suites the test of the hypothesis H3 and H6. the $R^2 = .834$ depicts that the model explains 83.4% of the variance on engagement. See Annex 4

Table 2 shows the summary of the findings.

Table 3.10 Multiple regression analysis Satisfaction, Gamification on Brand engagement

Hypothesis	Regression Weight	Std.Error	β	t	p-value	Result
	(Constant)	B=0.222	0.116		t=1.921	Sig= 0.056
H3	SAT-BENG	.038	.258	17.038	000	Supported
H6	GAMI-BENG	.040	.700	6.288	000	Supported

Note. * $p < 0.05$ SAT: Satisfaction, BENG: Brand engagement, GAMI: gamification, β -Standardized Coefficient,

H3 confirms whether satisfaction exerts a positive effect on brand engagement. The results show that satisfaction has a significant and positive impact on brand engagement ($\beta = 0.258$, $t = 17.038$, $p = 0.000$). Hence, H3 was supported

Subsequently, H6 was simultaneously tested to determine gamification's weak impact on satisfaction. The results show that gamification has a significant and positive impact on brand engagement ($\beta = 0.700$, $t = 6.288$, $p = 0.000$). Hence, H6 is false.

Lastly, satisfaction, gamification, and brand engagement were tested on loyalty using multiple regression. This choice was used to test the hypothesis (H4, H7. & H8). Results $F(3, 239) = 299.205$, $p < 0.001$, which indicates that multiple regression is appropriate for the test of this

hypothesis. $R^2 = 0.790$ depicts that the model explains 79.0% of the variance in loyalty. See Annex 5

Table 3 shows the summary of the findings.

Table 4.11 Multiple regression analysis Satisfaction, Gamification, Brand engagement on Loyalty

Hypothesis	Regression Weight	Std.Error	β	t	p-value	Result
	(Constant)	B=0.082	0.148		t =-0.551	Sig= 0.582
H4	SAT-LOY	.075	.716	10.360	.000	Supported
H7	GAMI-LOY	.053	.116	2.304	.022	Rejected
H8	BENG-LOY	.082	.082	1.200	.231	Rejected

*Note. *p < 0.05 SAT: Satisfaction, BENG: Brand engagement, GAMI: gamification, LOY: Loyalty, β - Standardized Coefficient,*

H4 evaluates whether satisfaction value exerts a positive effect on loyalty. The results revealed that satisfaction has a significant and positive impact on loyalty ($\beta = .716$, $t = 10.360$, $p = 0.000$). Hence, H4 was supported.

Also, H7 evaluates whether gamification exerts a positive effect on loyalty. The results show that gamification does not have a significant and positive impact on loyalty ($\beta = 0.116$, $t = 2.304$, $p = 0.022$). Hence, H7 was rejected

More so, H8 will confirm whether brand engagement exerts a positive effect on loyalty. The results ($\beta = 0.088$, $t = 1.200$, $p = 0.231$). confirm that brand engagement does not have a significant and positive impact on loyalty. Hence H8 was rejected

3.5.1 Additional analysis by age category

Perceived value gamification, and perceived quality were tested on satisfaction, using linear regression with the various age categories. The age categories range from 18-24years, 25 to 29 years and 30 years and above. See Annex 6, 7 and 8 for full table.

The age category of 18yrs to 24 years which represents 33% of the total sample size result showed that $F(3.78) = 48.420$, $p < .001$, which indicates that linear regression is suitable for the test of this relationship. The results revealed that perceived quality and gamification has a significant and positive impact on satisfaction with values ($\beta = 0.443$, $t = 4.636$, $p = 0.000$) and ($\beta = 0.644$, $t = 4.417$, $p = 0.000$) respectively. On the other hand, perceived value did not have significant impact

hence an inverse relation to satisfaction with values ($\beta = -0.273$, $t = -2.148$, $p = 0.035$) This is depicted in the table below

Table 3.12 Liner regression analysis (18-24years)

Model		Std. Error	Standardized	t	Sig.
			Coefficients β		
1	(Constant)	0.262		6.715	0.000
	PVALUE	0.114	-0.273	-2.148	0.035
	PQUAL	0.072	0.443	4.636	0.000
	GAMIF	0.123	0.644	4.417	0.000

a Dependent Variable: SATISF
b Selecting only cases for which
Age Groups 18-24 years

For the age category of 25yrs to 29 years (representing 50.60% of total respondents) result showed that $F(3.119) = 110.101$, $p < .001$, which indicates that linear regression is suitable for the test of this relationship. The results revealed that perceived value and gamification has a significant and positive impact on satisfaction with values ($\beta = 0.656$, $t = 6.788$, $p = 0.000$) and ($\beta = 0.361$, $t = 3.799$, $p = 0.000$) respectively. On the other hand, an inverse relationship between satisfaction and perceived quality results from the lack of a meaningful impact. ($\beta = -0.139$, $t = -1.397$, $p = 0.165$) This is depicted in the table below

Table 3.13 Liner regression analysis (25-29 years)

Model		Std. Error	Standardized	t	Sig.
			Coefficients β		
1	(Constant)	0.209		4.335	0.000
	PVALUE	0.088	0.656	6.788	0.000
	PQUAL	0.089	-0.139	-1.397	0.165
	GAMIF	0.096	0.361	3.799	0.000

a Dependent Variable: SATISF
b Selecting only cases for which
Age Groups 25-29 years

For the age category of 30 years result showed that $F(3.34) = 41.774$, $p < .001$, which indicates that linear regression is suitable for the test of this relationship The results revealed that perceived value and perceived quality has no significant impact on satisfaction with values ($\beta = 1.501$, $t =$

2.433, $p = 0.200$) and ($\beta = 0.421$, $t = 1.840$, $p = 0.074$) respectively. On the other hand, an inverse relationship between satisfaction and gamification results from the lack of a meaningful impact. ($\beta = -1.065$, $t = -2.097$, $p = 0.044$). This age category represents the least percentage of the total sample size hence this result which is depicted in the table below

Table 3.14 Liner regression analysis (30 years >)

Model		Std. Error	Standardized	t	Sig.
			Coefficients β		
1	(Constant)	0.417		3.23	0.003
	PVALUE	0.569	1.501	2.433	0.020
	PQUAL	0.245	0.421	1.84	0.074
	GAMIF	0.545	-1.065	-2.097	0.044

a Dependent Variable: SATISF
b Selecting only cases for which
Age Groups 30 years >

See Annex 6, 7 and 8 for full table

3.6 Discussion

The purpose of this research was to test the model to understand and assess the impact of gamification and brand engagement on loyalty to Betpawa Ghana. The results demonstrated that gamification, brand engagement, satisfaction, and other variables in the model impact one another positively and negatively.

In order to increase the theoretical understanding of the betting industry, many contributions can be made by elaborating on the goals set out in this study. First of all, the results supported Hypothesis 1(H1) which revealed the positive impact of CPV on CS with ($B = .201$, $t = 2.938$, $p = .004$) making it align with previous studies. This finding is consistent with earlier research such as Ullah 2012, Jalil et al 2016, and Kusumawati et al 2020) provides a theoretical foundation and conceptual framework, based on these variables.

Hypothesis 2 (H2) also revealed the positive impact of CPQ on CS with ($B = .282$, $t = 5.068$, $p = .000$) making it align with previous studies. This outcome is in line with past research. such as Kuo et al. 2009; Kusumawati et al 2020; Hoe et al 2018 and Joung 2016 (whose research emphasized the effects of perceived quality and perceived value of campus food service on customer

satisfaction).

Furthermore, satisfaction positively impacted engagement with H3 ($B = .675$, $t = 17.038$, $p = .000$) from this result. The findings correspond to previous research work from Abror, 2019; Vasić, Kilibarda, & Kaurin, 2019, Pandey et al., 2020; Zaid & Patwayati, 2021. The results from this research also back the statement of Pandey et al., 2020 who stated that "Customer satisfaction is a customer's cumulative experience based on all of his or her previous experiences with a good or service as determined by post-hoc evaluation of consuming experience."

Additionally, customer satisfaction has impacted loyalty positively as it is demonstrated in this study. This is shown as H4 ($B = .774$, $t = 10.360$, $p = .000$) hence showing a strong significance to the study. The study's finding concurs with Klaus 2013; Chandra 2014 and Aymar & Joseph, 2019, whose study revealed that the two factors are interconnected; customer satisfaction impacts brand loyalty, and brand loyalty influences customer satisfaction.

The impact of gamification has also been shown by emphasizing the significance of customers' incentives to play the game as well as their general satisfaction and enjoyment with the purchasing experience (Bauer et al. 2020). The research result proved that gamification does have an effect on satisfaction, thus H5 ($B = .312$, $t = 3.980$, $p = .000$) shows a significant impact. The study's findings concur with previous study Bauer et al. 2020; Yin 2022.

Moreso, Hypothesis 6 (H6) also revealed the positive impact of gamification on engagement ($B = .241$, $t = 6.288$, $p = .000$) which proved that H6 predicted a weak impact on customer engagement. This research finding disputes previous studies like (Gatautis et al. 2016), who assess the influence of gamification on brand engagement in the Lithuanian market. Factors of geolocation and the services provided by a company may influence this very impact. Hence the need for more research to be done in this field.

Hypothesis 7 (H7-gamification) & 8 (H8-engagement) both proposed a positive impact on loyalty. Both variables showed no significant impact on loyalty with ($B = 0.121$, $t = 2.304$, $p = .022$) for gamification and ($B = .098$, $t = 1.200$, $p = .231$) for engagement. This result concerning gamification and loyalty goes contrary to empirical result done by previous research done by Leclercq, Poncin, & Hammadi, 2017; Hwang & Choi, 2019 and Berger et al., 2018 who concluded games evokes loyalty to a particular brand. In contrast to earlier studies, customer engagement also did not have a significant impact on loyalty in this research. This disputes the research done by Loureiro 2012 and Dwivedi 2015 whose findings were otherwise.

Lastly, the regression analysis done on age categories unveiled different result as per the age range. Respondent between the age 25- 29 years' perceived value of the BetPawa service and gamification interest had a strong relationship on satisfaction with results ($\beta = 0.656$, $t = 6.788$, $p = 0.000$) and ($\beta = 0.361$, $t = 3.799$, $p = 0.000$) respectively. No extensive research has been done within this field, hence the need for more research. On the other hand, majority of the respondent with the age category which account for half of the population sample size spend much time in retail shop in order to get incentives from betting retail centres. The effect of gamification could be addictive to the youth as portrayed in papers like Aragay, 2021.

3.7 Conclusions and Recommendations

Gamification has been employed recently in marketing, healthcare, and education with the goal of increasing customer loyalty and engagement, motivating staff, and changing people's behavior. Similar persuasion-based loyalty programs, like credit cards and frequent flyer miles, affect user behavior without necessitating any kind of change. On the other hand, it is important to understand the effectiveness of gamification as a marketing and engagement approach in the present era. In different parts of the world, the betting sector is one that is rapidly expanding. As a result, it will be used as a reference for literature and for these industries to comprehend the proper applications of gamification in their operations and clients' perspectives. This study aimed to assess the impact of gamification and brand engagement on customer loyalty to BetPawa Ghana.

1. According to earlier research studies, gamification offers businesses a lot of benefits, including higher productivity, greater competitiveness, motivation, engagement, the creation of perception and value, and the development of loyalty intents. Consequently, all of these factors were added to the model.
2. Secondly, variables like perceived value and quality have had an impact on customer satisfaction in previous studies. The more a customer has a good perception of the quality of the product and service, the more value is created in the mind of the customer. This can be achieved if the needs of customers are met to the point of satisfaction. Other researches research also states that gamification elements appeal to the satisfaction of the customer and evoke a sense of accomplishment. These accomplishments come in the form of points, badges, and a leaderboard. Loyalty, on the other hand, is one of the ultimate goals of most

organizations because it indicated the level of attachment to the services provided by these firms. This could be very difficult to achieve if the brand engagement level is not sustained. This is the reason why all these variables were presented in the model to generate this research finding.

3. There is no doubt about the numerous benefits of gamification which include the creation of a pleasant atmosphere, increasing the effectiveness of operation, and motivation enhancement. On the other hand, it is very important to know when and how to apply the use of gamification in operation or marketing strategies. This is because the expected outcome of its adoption may vary from one organization to another.
4. Gamification may have a negative influence on customer loyalty. Other customer-focused strategies like customer acquisition and retention may be used in conjunction with these marketing efforts to further strengthen consumer commitment to the brand. This will be beneficial information for companies.

Below is the conclusion derived from the empirical analysis.

1. After data was analyzed, a conclusion can be drawn that perceived value, as well as perceived quality, has an impact on satisfaction as portrayed in the model above. Perception of value and quality plays a vital role in most business settings. Therefore, businesses should focus on the need to satisfy the need of their customer base. Gamification has also been shown to improve the satisfaction of services among customers when infused into the operation of services.
2. Gamification is one of the most important variables within this model which has shown the strongest impact among all the variables chosen for this study with the exception of loyalty. Other research finding shows quite the opposite results while others tend to agree with it. Since this research is only limited to the betting industry, this could be a new discovery within this sector.
3. Satisfaction was the only variable that demonstrated a strong relationship with loyalty in these results. It speaks volumes that when customers are satisfied with an organization's product and services, they are most likely to stay loyal and stick to that particular brand. Even though brand engagement as seen in this research did not have an impact on loyalty,

this could be a result of the betting industry since it needs customers to be constantly engaged with their services. Satisfaction on the other hand could change the narrative.

4. Gamification reveal to play a vital role in brand engagement as presented in the result. This seems to be very evident in previous research associated with gamification and brand engagement. Hence this research results add to the literature to strengthen this relationship.
5. Moreso, a regression analysis was done to know the impact of perceived value, perceived quality, and gamification on satisfaction based on the age categories of the respondent. The result revealed varying relationships among these variables on satisfaction. The younger generation that fell between the age of 18 and 24 years agree that the perceived value of the company and gamification did have an impact on their satisfaction level while the 25 to 29 years age category showed that perceived value and gamification had an effect on their satisfaction level within Betpawa services.

Recommendations based on the presented above conclusions.

1. 1. The first issue is the inconsistent results of gamification's effects on loyalty in the literature. The betting industry was portrayed differently in this study. Consequently, additional recommendations for applying this research to different sectors. This will contribute to advancing the little-known field of gamification research and findings.
2. 2. This study was conducted in Ghana, a country in West Africa. So, it would be really useful to carry out this research on several continents. To understand how these variables connect to one another in various contexts, an insightful comparison study may be done.
3. 3. The outcomes of this study are a major revelation for the majority of the betting industries in West Africa. Therefore, recommendation for these companies is to identify alternative, more effective strategies to increase customer loyalty while bucking the trend of implementing gamification.

The goal of this study was to investigate the impact of gamification and brand engagement on the loyalty of customers of betting companies in Ghana. Some results showed already established relationships as shown in previous literature thus the supported hypothesis. Others linkages showed no significant relationship. Therefore, loyalty in this research is not impacted by gamification or brand engagement.

3.8 Limitations of the research

This study has some limitations. Data collection was a time-consuming process since data was collected from various BetPawa retail shops across 3 cities in Ghana. Also, there is a lack of previous research studies on this topic of gamification which includes a specific scale of measuring gamification.

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SUMMARY

Divine Dzidzor, Dogbe

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The ultimate objective of market-leading businesses is to exert greater effort to encourage repeat purchases from brand-loyal customers. Therefore, most of these firms have identified several approaches to achieve such goals. Gamification, a relatively new trend, has already become a common procedure in the field. It was predicted that it would eventually play a crucial role in businesses' client loyalty and marketing initiatives. The idea has been researched in the area of design and human-computer interaction, but it is also seen as a vital marketing tool. Therefore, the main goal of this study was to assess the impact of gamification and brand engagement on customer loyalty to Betpawa, Ghana. A model was developed during the research and served as the basis for testing relationships between variables. Perceived value, perceived quality, satisfaction, gamification, brand engagement, and loyalty were among the variables that revealed important linkages. According to the study, perceived value, perceived quality, and gamification all have a significant impact on satisfaction. Loyalty was significantly influenced by satisfaction as well. Two of the variables, however, did not significantly affect loyalty. Additionally, regression analysis was done to test the relationship between perceived value & quality as well as gamification on satisfaction within age groups within the sample population. This research result

varied amongst these categories. The results and conclusions of this study may suggest that betting organizations discover alternate, more successful methods of boosting consumer loyalty while defying the trend of adopting gamification. One major limitation of this study was the constraint of time. However, this master's thesis has significant theoretical and practical significance, and decision-makers in the betting industry can utilize it as a guide to make smart operational decisions.

3	The performance of BetPawa exceeds my imaginary standard for betting service.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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S/N	Statement	1	2	3	4	5	6	7
1	I really love BetPawa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	If I am going to obtain points to be cashed out, my first choice will always b BetPawa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	If I am able to use the BetPawa betting machines, I never go to any other betting machines of other companies to obtain points to be cashed out.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	In general, I consider myself a loyal customer of BetPawa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	My friends and the people I know prefer to use BetPawa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	I think BetPawa is superior to other betting companies that allow gain points to be cashed out.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section E

Finally. We would like to ask about your general approach toward BetPawa.

Kindly rate on a scale of **1 to 7** with **1** meaning **Strongly Disagree** and **7** meaning **Strongly Agree**

Section F:

Demographic information

Tick the appropriate answer where applicable.

1. Male Female

2. Age: years

3. Education Primary Secondary Tertiary

Annex 2

Table 3.1 Scales of measurement and sources

VARIABLE	Scale	Source
Satisfaction $\alpha = 0.97$	I feel satisfied with my overall experience using the gamification app. I feel pleased about my overall experience using the gamification app. I feel content about my overall experience using the gamification app. I feel delighted about my overall experience using the gamification app.	Liao, C., Liu, C.C., Liu, Y.P., To, P.L. and Lin, H.N. (2011), "Applying the expectancy disconfirmation and regret theories to online consumer behavior", <i>Cyberpsychology, Behavior, and Social Networking</i> , Vol. 14 No. 4, pp. 241-246.
Service satisfaction $\alpha=0.87$	Overall, I feel satisfied with the casino. The casino's performance exceeds my expectations. The casino's performance exceeds my hypothetical ideal for casino service	Shi, Y., Prentice, C., & He, W. (2014). Linking service quality, customer satisfaction and loyalty in casinos does membership matter? <i>International Journal of Hospitality Management</i> , 40, 81-91.
Brand engagement <i>Emotional dimension</i> $\alpha = 0.881$	<i>Emotional dimension</i> I feel excited about this brand I am heavily into this brand I am passionate about this brand I love this brand	Xi, N., & Hamari, J. (2020). Does gamification affect brand engagement and equity? A study in online brand communities. <i>Journal of Business Research</i> , 109, 449-460.
<i>Cognitive dimension</i> $\alpha = 0.812$	<i>Cognitive dimension</i> I like to learn more about this brand I pay a lot of attention to anything about this brand	

Social dimension $\alpha =$
0.853

Anything related to this brand grabs
my attention
I think about the brand a lot

Social dimension

I love talking and using products of
the brand with my friends

I enjoy talking and using products of
the brand more when I am with
others

Talking and using products of the
brand are more fun when other
people around me do it too

I feel good about sharing my
experiences with the products of the
brand with others

I feel fellowship with other people
who use the products of the brand

I like recommending the products of
the brand to others

Loyalty

$\alpha=0.88$

I really love the gamified website.

If I am going to obtain free goods via
points, my first choice will always be
the gamified website.

If I am able to use the gamified
website, I never go to any other
websites where I can obtain free
goods via points.

In general, I consider myself a loyal
customer of the gamified website.

My friends and the people I know
prefer to use this gamified website.

I think that this gamified website is
superior to other websites where I

Hsu, C. L., & Chen, M. C.
(2018). How does gamification
improve user experience? An
empirical investigation on the
antecedences and
consequences of user
experience and its mediating
role. *Technological
Forecasting and Social
Change, 132*, 118-129

	can obtain free goods via points or shopping coupons	
Service satisfaction $\alpha=0.87$	Overall, I feel satisfied with the casino. The casino's performance exceeds my expectations. The casino's performance exceeds my hypothetical ideal for casino service	Shi, Y., Prentice, C., & He, W. (2014). Linking service quality, customer satisfaction and loyalty in casinos, does membership matter?. <i>International Journal of Hospitality Management</i> , 40, 81-91.
Perceived quality $\alpha=0.86$	I think that the services of the gamified website are valuable. I think that the service quality of the gamified website is satisfactory. I think that the external appearance of the gamified website is well designed. I think that the interior design (e.g. award system mechanism) of the gamified website is good.	Hsu, C. L., & Chen, M. C. (2018). How does gamification improve user experience? An empirical investigation on the antecedences and consequences of user experience and its mediating role. <i>Technological Forecasting and Social Change</i> , 132, 118-129
Perceived Value $\alpha = 0.80$	Customer benefits are always at the forefront This company provides quality service beyond the expectations of its customers The quality of the service provided is the most important feature that distinguishes this betting company from others	Özkan, P., Süer, S., Keser, İ. K., & Kocakoç, İ. D. (2019). The effect of service quality and customer satisfaction on customer loyalty: The mediation of perceived value of services, corporate image, and corporate reputation. <i>International Journal of Bank Marketing</i> .
Gamification $\alpha = 0.91$	The company's website attracts me because it gives me an opportunity to earn benefits.	Conaway, R., & Garay, M. C. (2014). Gamification and service marketing. <i>SpringerPlus</i> , 3(1), 1-11.

The company's website allows me to move to higher levels of participation to receive more benefits.

I like being the best among my friends with gaming activities.

I have fun when I spend time on the website.

Annex 3

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	PQUAL, PVALUE, GAMIF ^b	.	Enter

a. Dependent Variable: SATISF

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.810 ^a	.655	.651	.80189

a. Predictors: (Constant), PQUAL, PVALUE, GAMIF

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	292.276	3	97.425	151.511	.000 ^b
	Residual	153.683	239	.643		
	Total	445.960	242			

a. Dependent Variable: SATISF

b. Predictors: (Constant), PQUAL, PVALUE, GAMIF

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.106	.159		6.973	.000
	GAMIF	.312	.079	.323	3.980	.000
	PVALUE	.201	.068	.217	2.938	.004
	PQUAL	.282	.056	.329	5.068	.000

a. Dependent Variable: SATISF

Annex 4

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	SATISF, GAMIF ^b	.	Enter

a. Dependent Variable: ENGAGEMENT

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.914 ^a	.835	.834	.53420

a. Predictors: (Constant), SATISF, GAMIF

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	346.731	2	173.365	607.509	.000 ^b
	Residual	68.489	240	.285		
	Total	415.220	242			

a. Dependent Variable: ENGAGEMENT

b. Predictors: (Constant), SATISF, GAMIF

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.222	.116		1.921	.056
	GAMIF	.241	.038	.258	6.288	.000
	SATISF	.675	.040	.700	17.038	.000

a. Dependent Variable: ENGAGEMENT

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	SATISF, GAMIF, ENGAGEMENT ^b		Enter

a. Dependent Variable: LOYALTY

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.889 ^a	.790	.787	.67726

a. Predictors: (Constant), SATISF, GAMIF, ENGAGEMENT

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	411.717	3	137.239	299.205	.000 ^b
	Residual	109.624	239	.459		
	Total	521.341	242			

a. Dependent Variable: LOYALTY

b. Predictors: (Constant), SATISF, GAMIF, ENGAGEMENT

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.082	.148		.551	.582
	GAMIF	.121	.053	.116	2.304	.022
	ENGAGEMENT	.098	.082	.088	1.200	.231
	SATISF	.774	.075	.716	10.360	.000

a. Dependent Variable: LOYALTY

Annex 6

Variables Entered/Removed^{a,b}

Model	Variables Entered	Variables Removed	Method
1	GAMIF, PQUAL, PVALUE ^c	.	Enter

a. Dependent Variable: SATISF

b. Models are based only on cases for which
Age Groups = 18-24

c. All requested variables entered.

Model Summary

Model	R Age Groups = 18-24 (Selected)	R Square	Adjusted R Square	Std. Error of the Estimate
1	.807 ^a	.651	.637	.75090

a. Predictors: (Constant), GAMIF, PQUAL, PVALUE

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.906	3	27.302	48.420	.000 ^c
	Residual	43.981	78	.564		
	Total	125.887	81			

a. Dependent Variable: SATISF

b. Selecting only cases for which Age Groups = 18-24

c. Predictors: (Constant), GAMIF, PQUAL, PVALUE

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.760	.262		6.715	.000
	PVALUE	-.246	.114	-.273	-2.148	.035
	PQUAL	.333	.072	.443	4.636	.000
	GAMIF	.544	.123	.644	4.417	.000

a. Dependent Variable: SATISF

b. Selecting only cases for which Age Groups = 18-24

Variables Entered/Removed^{a,b}

Model	Variables Entered	Variables Removed	Method
1	GAMIF, PVALUE, PQUAL ^c		Enter

- a. Dependent Variable: SATISF
 b. Models are based only on cases for which Age Groups = 25-29
 c. All requested variables entered.

Model Summary

Model	R Age Groups = 25-29 (Selected)	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857 ^a	.735	.728	.73161

- a. Predictors: (Constant), GAMIF, PVALUE, PQUAL

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	176.793	3	58.931	110.101	.000 ^c
	Residual	63.694	119	.535		
	Total	240.487	122			

- a. Dependent Variable: SATISF
 b. Selecting only cases for which Age Groups = 25-29
 c. Predictors: (Constant), GAMIF, PVALUE, PQUAL

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.905	.209		4.335	.000
	PVALUE	.598	.088	.656	6.788	.000
	PQUAL	-.125	.089	-.139	-1.397	.165
	GAMIF	.365	.096	.361	3.799	.000

- a. Dependent Variable: SATISF
 b. Selecting only cases for which Age Groups = 25-29

Variables Entered/Removed^{a,b}

Model	Variables Entered	Variables Removed	Method
1	GAMIF, PQUAL, PVALUE ^c		Enter

- a. Dependent Variable: SATISF
 b. Models are based only on cases for which Age Groups = >30
 c. All requested variables entered.

Model Summary

Model	R Age Groups = >30 (Selected)	R Square	Adjusted R Square	Std. Error of the Estimate
1	.887 ^a	.787	.768	.61257

- a. Predictors: (Constant), GAMIF, PQUAL, PVALUE

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.025	3	15.675	41.774	.000 ^c
	Residual	12.758	34	.375		
	Total	59.784	37			

- a. Dependent Variable: SATISF
 b. Selecting only cases for which Age Groups = >30
 c. Predictors: (Constant), GAMIF, PQUAL, PVALUE

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.347	.417		3.230	.003
	PVALUE	1.386	.569	1.501	2.433	.020
	PQUAL	.451	.245	.421	1.840	.074
	GAMIF	-1.143	.545	-1.065	-2.097	.044

- a. Dependent Variable: SATISF
 b. Selecting only cases for which Age Groups = >30