# Can Indian Millennials be Engaged Through Online Customer Gamified Experience?

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## Abstract

**Purpose: Extant literature has indicated that millennials in emerging markets could not trust the brand. Hence, companies should be able to build the correct type of trust and experiences to create a gamified experience, resulting in brand loyalty. This paper attempted to establish the relationships among online gamification experience, customer brand engagement, online engagement intention, and brand loyalty in India's developing economy.**

**Methodology: We conducted a self-administered web-based questionnaire-based study among Indian millennials between February and April 2020. The study applied SEM to explore the proposed association in the structural equation path model.**

**Findings: The current study confirmed that the gamification experience among the Indian millennials had a significant favorable influence on millennials' continued engagement intention, which positively impacted customer brand engagement and brand loyalty. The gameful experience was positively related to continued engagement intention. Continued engagement intention and customer brand engagement were also positively correlated. Moreover, customer brand engagement was positively associated with brand loyalty. However, the gamified experience had a negative association with customer brand engagement.**

**Originality: The study positioned the role of online-gamified experience amongst Indian millennials towards brand engagement.**

***Keywords:*** **gameful experience, customer brand engagement, continued engagement intention, brand loyalty**

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In recent years, video-based gaming has been a part of every consumer's life, either directly or indirectly. As technology evolves, games and their forms have also evolved, which have become part of the human routine. In other words, the route a brand connects to its consumer is via myriad touchpoints that are potential ways to keep consumers attracted to the brand. In the last few years, gamification has joined the trend bandwagon, which refers to the transformation of technology to put to better use. Services, systems, and organizations are increasingly looking forward to associating themselves with something game-like. Studies used it in a broader context from health, commerce, management, and other aspects. Scholars have also examined the digital economy shaped by analytics, including mobile gamification, social media use, and robotic process automation at

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workplaces to enable Generation Y in the IT-enabled services industry (Patra et al., 2019). Studies have also posited that providing a gamified experience would help engage employees within the HR context, increasing productivity. Hence, HR professionals may use it more frequently (Joshi et al., 2017). Högberg et al. (2019) identified intangible value consumers add to a brand through their online engagement through word of mouth increased communication with businesses and other consumer base. Research studies have focused on methodologies for improving this customer value by increasing brand engagement. One such technique increasingly used to enhance brand engagement is gaming elements. These elements engaging the consumers by giving them something extra by a high technology gaming experience through online and virtual mediums is known as online gamification. Extant literature has focused on the fact that most gamification strategies fail despite their popularity. Hence, scholars have investigated the utilization and impact of gamification (hurdles, curiosity, fantasy, and control) by companies or brands to capitalize on brand engagement on social media. Gamification elements have greater brand engagement; a reliable social media strategy will rightly determine the elements brands use to achieve the highest value (Nobre & Ferreira, 2017). Recently, organizations have adopted game elements to encourage gameful experiences (Huotari & Hamari, 2017) among consumers.

The study is motivated by millennials in emerging markets who do not trust brands. Extant literature underpins the fact that companies should be able to build the correct type of trust and experiences to create a gamified experience, which can result in brand loyalty. Studies have posited that gamification is a tool that assists the human-computer interaction, which motivates consumers in carrying out various functions. Hence, this paper attempts to establish the relationships among online gamification experience, online engagement intention, customer brand engagement, and brand loyalty in a developing economy.

This study addresses the following research questions : Can Indian millennials be engaged through an online customer gamified experience ? Is there a correlation between gamification experience, continued engagement intention, customer brand engagement, and brand loyalty ? The study also tries to respond to a follow-up question: Is there an association between online gameful experience and brand loyalty ? We evaluate these questions by investigating the hypothesized relationships using the SEM path approach.

Studies indicated that literature on gamification and brand engagement lacks empirical evidence and its ability to involve customers. The present study explores the unique contribution to understanding the millennials of India's emerging market. The international brand's image and self-image may be essential in understanding brand loyalty.

## Literature Review and Hypotheses

### *Experience Through Gamification*

The widespread adoption of smartphones has flagged the path for the concept of gamification. Gamification is well-defined as the “process of enhancing a service with affordances for gameful experiences to support users' overall value creation” (Huotari & Hamari, 2017, p.20). Gamification enables value creation, which supports creating customer value in online and offline retail stores. Gamification is an emotional trend involving gaming qualities without entailing a full-fledged gaming experience (Kashive et al., 2022). Gamification adopts game-based elements using non-game settings, which help create game-like added consumer experiences described as gameful experiences by the customers (Huotari & Hamari 2017). Researchers use "game-like experiences" as an alternative expression for a gamified experience (Hammedi et al., 2017). The present research adopted the expression 'gameful experience,' a multidimensional construct that is a value creation of the gamified service and the customer using the game (Högberg et al., 2019).

To differentiate the gameful experience from the objective of playing the game itself, marketers encourage

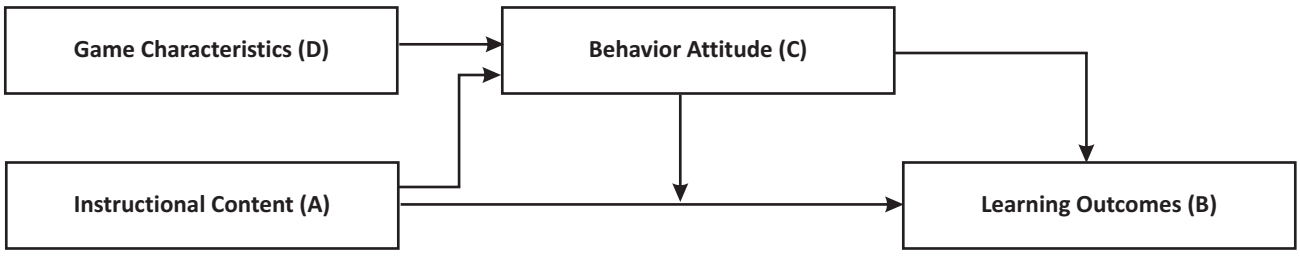
targeted behavior for future use of the service/product (Högberg et al., 2019) to create such experiences. The gameful experience stimulates game elements like levels, stories, rewards, and challenges that act as building blocks. Evaluation of a gameful experience is an enjoyable and fun experience that engages consumers' brand experience, especially for global brands, thereby encouraging them to purchase and increasing customer loyalty (Kashive et al., 2022). Studies have indicated that consumers in an emerging market have advanced levels of brand loyalty toward global brands due to the brand's engagement strategies, which results in their likelihood of purchasing the product (Hammedi et al., 2017).

### *Theoretical Framework*

Gamified research is a science of understanding how users create their gamification dimensions, elements, and qualities that help affect user engagement and experiences. However, understanding the theories of how gamified design elements interact and function with the situations, user's dispositions, and the characteristic of the target activities becomes vital. Theories have indicated that gamification affects the user's perceived motivation, learner's behavior, and user experiences (Landers et al., 2017). The technology-enhanced training enhanced model of Landers et al. (2017) provided an understanding of gamified systems based on the users' prior experience and attitude towards games. Self-determination theory, SDT, is a psychological concept that suggests the effects of a user's gamification elements impacting an individual's intrinsic motivation but primarily impacting the game's performance. Another established theory of motivation is a goal-setting theory (Evans, 2020) that individuals' have adopted to shape their gamification self-task performance/goal commitment, which uses leader boards (Landers et al., 2017) and badges which would increase the user activity in a gamified system.

The theory of gamified learning (Figure 1) provides processes involving game elements that affect a learning cycle. The foundation of this theory looks at instruction-based content influencing learning outcomes, behaviors, and attitudes affecting learning outcomes, game characteristics influencing changes in the attitude and behaviors, and behaviors and attitudes mediating the association between gaming characteristics and learning outcomes. This theory intends to influence an individual's learning behavior, attitude, and learning outcomes, that is, learner motivation and engagement. Thus, increased engagement makes the entire learning or experience of the product/service more effective (Landers et al., 2017).

**Figure 1.** ***Theory of Gamified Learning***




### *Customer Brand Engagement*

Consumer brand engagement as a concept has gained tremendous acceptance and has been considered an exciting research topic. Previous research has acknowledged the crucial interactive involvement between the brand and the

customer. Still, despite recent interests, the area of consumer brand engagement is not entirely explored. Based on the research, the study proposes that involvement, self-expressiveness, and participation are the vital constructs that directly impact brand loyalty (Nobre & Ferreira, 2017). Many organizations are constantly trying to manage and build communities around the brand using gaming communities, which help increase engagement and loyalty toward the brand. In a study conducted to examine the impact of customers' interaction with the touchpoints of a gamified experience, the results depicted that social-related factors and a sense of achievement positively connected with cognitive, emotional, and social brand engagement (Högberg et al., 2019).

An optimistic connection and association exist between gamification and customer brand engagement. Gamification is an effective technique that results in creating brand engagement. It also indicates that the interface with gamification might differently result in brand engagement as it depends on the gaming players' demographic factors and the type of gaming comfort (Xi & Hamari, 2020).

Gamification is considered a promising way to enhance consumers' brand engagement. The intended game offers its players the feeling of accomplishment and challenges as an incentive to continue playing the game. The elements of playfulness, competition, and social experience motivate the users and keep them engaged with the game and the brand; all these factors together form consumer brand engagement. Therefore, consumer brand engagement adopts a multidimensional behavioral construct involving cognitive, activation, and affective dimensions. Gamification thus supports creating engaging customer experience behaviors towards the company and the associated brand. The study's findings suggest that gamification significantly correlates with flow state. Moreover, it also positively correlates with gamification and customer brand engagement (Vitkauskaitė & Gatausis, 2018).

The development of gamification is one of the perspective directions that enable organizations to achieve their goals. Research shows that gamification encourages consumer intrinsic motivation and participation and provides a better experience to customers. These pros of gameful experiences are valuable to organizations. They inspire active consumer engagement through more prolonged and more frequent interactions, accessible and possible because of gaming elements in their marketing gimmicks. Usage of gamification allows achieving a subconscious effect – customer engagement that causes changes in purchase decisions. By applying gaming elements, organizations aim to encourage a particular consumer behavior, which creates value for the user and the organization. A user affected by extrinsic and intrinsic purposes receives value through rewards such as knowledge, awards, fun time, etc. Users of gamified activities also gain benefits for themselves. Research scholars reviewing gamification as a topic emphasized the relevance of gamification-based consumer engagement in the overall co-creation process between the service provider and the consumer (Werbach, 2014).

The idea of customer brand engagement (CBE) has received tremendous attention in recent past research studies. As per relationship marketing, S-D logic, and the theory of consumer culture - CCT, CBE has been promoting interactive results such as encouraging word-of-mouth (WOM) communication, brand loyalty, and retention by way of co-creating with customers' value (Cheung et al., 2021). In the current research, we embrace this CBE definition from literature as scholars proposed, which is consumers' positively valenced behavioral, emotional, and cognitive consumer-brand interaction activity. Research suggests three CBE constructs: cognitive, affective, and activation processing mechanisms based on the hierarchical effect of being affective, mental, and conative. Cognitive processing implies a consumer's thoughtful elaboration and processing activity towards interacting with a specific brand (Vitkauskaitė & Gatautis, 2018). The factor 'Affection' is explained as a consumer's constructive affection towards a particular brand in a consumer-brand interaction activity (Khan et al., 2020). Finally, activation relates to consumers' efforts to spend time and energy on a specific brand (Hollebeek et al., 2020). Research has also posited that CBE positively affects a consumer's brand satisfaction levels and thereby impacts loyalty toward the brand (Cheung et al., 2021).

### *Brand Loyalty*

Scholars state the degree of customers' attachment towards a particular brand as customer brand loyalty, a vital outcome variable across marketing-related literature studies. Its operationalizations differ across domains (Mattke & Maier, 2021). Studies also indicated that customer trust and loyalty would reduce the perceived risk (Rashid & Rokade, 2019). Gamification is an entity that firms adopt to establish higher levels of brand loyalty (Wolf et al., 2020). Researchers have focused on the behavioral commitment that measures buying frequency, category requirement share, and attitudinal loyalty (Kunkel et al., 2021). The intention to re-purchase a brand and the customers' commitment when considering the brand's unique values connect with 'attitudinal loyalty' (Kunkel et al., 2021). Brand loyalty exists across service organizations where loyal customers directly impact organizations' present and future revenue flows (Nobre & Ferreira, 2017). Satisfying customers and sustaining a lasting relationship has been a vital business strategy that businesses adopt in the current context of competitiveness.

The literature review summarizes that organizations build gaming communities around brands to increase brand engagement and loyalty. Previous research validates this belief, as there is still a shortage of enough evidence to support this claim. The study narrows the gap by assessing the gamified experience of the different game-based applications. The existing literature uses measurement scales developed to assess genre-specific applications (Norman 2013). They may not be generalized to various game-based applications as they capture experiential items and contexts, which may not be relevant to assessing the gamified experience of the different game-based applications.

## Hypotheses Development

Consumers' experiences of engaging with gamified app-based programs across non-gaming contexts are captured under the gamification experience, creating hedonic value. The hedonic experience creation over gaming-related challenges defines the flow's conceptual viewpoint (Lacka, 2020). When a person performs activities that balance the skill, the challenge is known as the flow perspective, which inherently motivates as a prominent source of enjoyment in consumers (Kim & Ahn, 2017). Subsequently, the experience of being tested is one of the drivers of game-based hedonic value (Lacka, 2020). Implementing a gamification challenge using touchpoints adds hedonic value through flow experiences as shopping-based motives may be considered hedonic (Hollebeek et al., 2020).

This hedonic value developed through gamification experiences supports driving continued engagement intention. The motivation for using the system arrives from the interface with the system, which is pleasing to use and hence helps create hedonic value. Such an interaction is motivated intrinsically by one's innate satisfaction than for specific separable outcomes (Kim & Ahn, 2017). Such inherent motivations in scholarly research depict enjoyment and predict intentions of using the entertainment systems. These intrinsically motivating values are of hedonic value, which drives the engagement to engage in such similar forthcoming activities; thus, we have proposed the subsequent hypotheses:

- **H01 :** Gameful experience is not related to continued engagement intention.
- **Ha1 :** Gameful experience is related to continued engagement intention.

Brand engagement drives continued engagement intention. Gameful experiences using co-creative interactions, that is, gamified and game services, form the basis for the value created (Högberg et al., 2019). The gameful experiences are the interactions related to the experiences using tools, contexts, and objects, which enhance user experiences relating to consumer brand engagement (Vitkauskaitė & Gatautis, 2018). These

gamified services co-create the interaction experience between the gamified service and the customer developed by a company. Such co-created interactions created through customer experiences with a brand give rise to iterative brand engagements (Högberg et al., 2019). There is a direct effect of brand commitments and brand trust on brand engagement and the customer's gameful experiences, thus strengthening its role as a strategic metric (Khan et al., 2020). Studies have also specified the significant influence of the customer's intention on the perceived usefulness while being engaged in the gamification process (Landers et al., 2017). Hence, we propose the subsequent hypotheses relating to the relationship between continued engagement intention on brand engagement:

- **H02.** Continued engagement intention and customer brand engagement are not related.
- **Ha2.** Continued engagement intention and customer brand engagement are related.

Gamification-related studies have indicated that such gameful experiences impact brand engagement. Scholars have investigated, including Vitkauskaitė and Gatautis (2018), the effect of gamified experience on consumer brand engagement in the Lithuanian market. However, the association wasn't strong as per the empirical results. Moreover, studies depicted gamified interactions as being optimally challenging, highly interactive, and positively connected with brand engagement's cognitive and emotional items (Berger et al., 2018). In a study explored by Xi and Hamari (2020), gamified experiences positively affect engagement with a brand, resulting in increased brand equity; hence, the hypotheses proposed are :

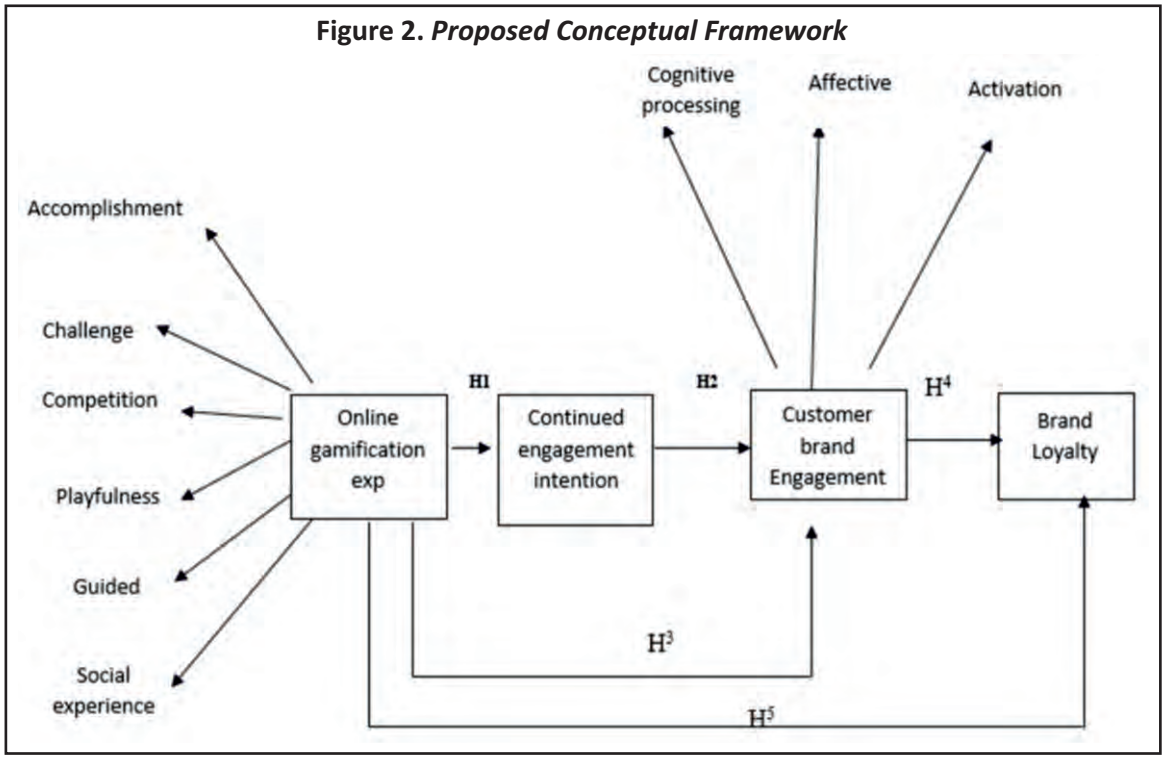
- **H03.** A gamified experience does not have an association with customer brand engagement.
- **Ha3.** A gamified experience has an association with customer brand engagement.

Fewer studies have investigated the relationships of CBE and its positive relationship with brand satisfaction and loyalty toward the brand (Cheung et al., 2021). The intensity of CBE on brand stimuli and investment depends on the brand-related activities across social media (sharing ideas and participating in brand experience discussions) and reflecting emotional, motivational, cognitive, and intentional consumer states (Högberg et al., 2019). Customers having a higher emotional connectedness towards a brand are highly motivated, promisingly satisfied, and loyal towards their participation in brand-related activities. Customers who enter positively balanced social media discussions are assumed to be highly satisfied and loyal towards the brand (Nobre & Ferreira, 2017). Studies have posited that brand engagement in the web-based setting and user experiences strengthen customer brand commitment and trust, which would exercise a substantial brand loyalty effect (Khan et al., 2020). Thus, we propose the below-stated hypotheses:

- **H04.** Customer brand engagement is not associated with brand loyalty.
- **Ha4.** Customer brand engagement is associated with brand loyalty.

The mobile gamification app is based on eight elements of gamification: recreation, coping-escape, fantasy, omnipotence, social, competition, location-based, and skill development (Chien & Wu, 2015). They used the quasi-experimental method to verify and confirm that mobile platform gamification design elements can effectively improve consumer brand loyalty through perceived values. Scholars have also confirmed that gamification affects the customer's intrinsic motivation. This construct has led to using loyalty programs, thus establishing the relationship between gamification and loyalty (Kim & Ahn, 2017). Thus, the proposed hypotheses are :

**Figure 2.** ***Proposed Conceptual Framework***




- **H05.** Gameful experiences toward brand loyalty are not related.
- **Ha5.** Gameful experiences toward brand loyalty are related.

The proposed conceptual framework is indicated in Figure 2.

## Methodology

### *Research Design*

The present study employed a quantitative method, and the questionnaire was prepared based on an extensive literature review. We also executed content validity. The study was preliminarily tested with 58 students from a university to warrant the precision of the structured survey, which was conducted before administering the primary investigation. A 3-step method premeditated by Anderson and Gerbing in 1988 inspects the predicted relationships projected in the study. Step 1 encompassed EFA, Step 2 comprised confirmatory factor analysis (CFA), and Step 3 included structural equation modeling (SEM).

### *Data Collection and Description of the Sample*

We conducted a self-administered online questionnaire survey among Indian millennials between February and April 2020. Parasuraman et al. (2005), in their paper on scale development for e-service quality, had described the criteria for selecting the respondents for the survey. Based on their recommendations, we picked our respondents on the following criteria: The respondents should be familiar with the concept of online gamification used as a tool for brand engagement. They should have participated in at least one online game launched by any brand. We sent

invitations via emails to a sample of 670 customers across Indian millennials with the largest Gen Y population globally. This study comprises people born between 1981 and 1996. This Gen Y population in India projects at 426 million, roughly 34 % of the total Indian population.

Based on the projected population of 426 million, we applied Slovin's formula to calculate the sample size of the population. As it is impossible to study the whole population, especially the millennial generation of India, the sample size for the study was smaller and may use a random sampling method. Slovin's sample size calculation provides the desired amount of accuracy for the researchers (Ellen, 2012). We adopted Slovin's formulae to determine the size of the sample, which resulted in arriving at 385 respondents. We ultimately managed to collect 461 valid responses for the study. Since the target population was millennials and multilingual, the examination was in English.

Additionally, specialists from the domains of relationship marketing, digital, and brand management appraised and provided judgment towards the reliability of every item. Few alterations supported the pre-testing phase. The web-based form comprised of two parts. The first part involved the participant's familiarity with the concept of online gamification as a tool for brand engagement. The questions were like : have they participated in any online game, and what type of gamification activity have they engaged in ? (Online game/AR Game/ AR-VR Filter/Other), with which brand have they been most closely associated ? The second part comprised questions about understanding the respondents' online gamification experiences, continued engagement intention, brand loyalty, and customer brand engagement. The final section of the study dealt with capturing the participants' demographic profile characteristics. The response rate of the administered study was 71.6%, with 480 respondents completing the questionnaire. The responses were checked for questionnaires having missing data and data having outliers. Of the total 480 responses, 19 were identified as not suited for data analysis as they were based on incomplete information and had outliers. We utilized a balance of 461 completed questionnaires to measure the proposed conceptual model relationships.

### *Measures*

Gamification literature provides measurement scales incorporating numerous facets of the gameful experience. The prominently used measures are the game-engagement questionnaire (GEQ), immersion questionnaire (IQ), and the game-experience questionnaire (GExpQ) (Kashive et al., 2022). The IQ recognizes five immersion constructs: real-world dissociation, cognitive and emotional involvement, control, and challenge. The GExpQ involves four stages of game engagement: absorption, presence, immersion, and flow. Finally, the GExpQ depicts seven game-experience constructs: sensory, annoyance, competence, imaginative immersion, challenge, negative affect, flow, and positive affect. Despite these three measurement scales used in gaming research, certain drawbacks curb their application across gamification studies as they assess genre-specific applications (Norman, 2013). Hence, they may not be generalized to various game-based applications as they capture experiential items and contexts, which may not be relevant to assessing the gamified experience of the different game-based applications. Therefore, we adopted an empirically tested gameful experience scale (GAMEFULQUEST). The GAMEFULQUEST is a scale that captures consumers' experiences engaging with gamified applications through gameful experiences. This instrument has seven dimensions: playfulness, accomplishment, competition, challenge, guided, social experience, and immersion. However, for the proposed study, only seven items were considered.

Hollebeek et al.'s (2020) research on CBE operates on three aspects: cognition, affection, and activation processing, which captured the behavioral aspects of consumer and brand interactions. The cognitive construct involved two items; the affective construct consisted of two items, while the activation construct was measured using two things. Further, continued engagement intention (CEI) was evaluated as the mindful idea for the futuristic behavior of gamified activity while consuming the service. The CEI scale items were measured using the

model adopted by Högberg et al. (2019). We deliberated on brand loyalty and captured the overall attitudinal loyalty of a particular brand rather than evaluating loyalty of the brand using the actual 'brand and loyal behavior.' The four dimensions of the brand loyalty scale were proposed by the scholars Yoo and Donthu (2001).

## Analysis and Results

The sample demographics are depicted in Table 1. To inspect the projected relations of the study, we examined the data commissioning using a three-step procedure as operationalized by the scholars Anderson and Gerbing in 1988. Step 1 included exploratory factor analysis (EFA), Step 2 involved administering the confirmatory factor analysis (CFA). Finally, Step 3 elaborated on the conduct of structural equation modeling (SEM).

Exploratory factor analysis summarizes the data set to comprehend the relationship and patterns among the items. The extraction using principal component analysis, a data reduction technique, supports extracting the maximum variance in the data, thereby reducing many variables into fewer components, followed by principal axis factor analysis. We used varimax rotation to rotate the extracted factors, which is an ideal rotation technique to start exploring the data set for better interpretation. This rotation technique helps group the 18 identified variables into specific groups of variables termed as factors. Of the total responses collected for the study, 208 samples were utilized to administer EFA, while we examined 253 samples for running CFA. The sample had similar demographic characteristics as the entire data set of 461 respondents. The exploratory factor analysis generated a factor solution that explained 66.63 % of the overall variance. The items, which had loading less than 0.6, were removed from the model. One item for construct "Immersion" had to be removed as its loading was less than 0.6. In an emerging market, this infers that the millennials of India do not think these games need mental involvement. Also, the second item to be removed from the study was customer brand engagement, the "activation" dimension. The study infers millennials do feel engaged with the brand for affection and cognition but not activation (I am spending a lot of time during the use of Brand X in comparison to other brands). The principal component analysis, varimax rotation, and the primary loadings on every factor are described in Table 2.

The software package employed to conduct the SEM of the proposed relationships was AMOS 20.0. Initially, the hypothesized model helped in recognizing the study through CFA. The data collected from 253 samples were analyzed to demonstrate the proposed hypotheses. Apropos to the results of CFA, the current research helps investigate the measures of convergent validity and discriminant validity. Further on, we investigate the hypothesized relationships using the SEM path approach. The study analyzed $\chi^2$ test, comparative fit index (CFI), normed-fit index (NFI), incremental-fit index (IFI), RMSEA, and adjusted goodness-of-fit statistic to test the goodness of fit (GFI) of the proposed measurement model. The common-bias method might occur from single

**Table 1.** ***Demographic Profiling of the Sample***

| Features of the Sample | Item | Frequency | Percentage |
|---|---|---|---|
| Gender | Male | 254 | 55 |
| | Female | 207 | 45 |
| Age | 20 – 35 yrs | 335 | 73 |
| | Above 36 yrs | 126 | 27 |
| Monthly Household Income | Less than 50K | 125 | 27 |
| | 50k – 1 lac | 146 | 32 |
| | Above 1 lac | 190 | 41 |

**Table 2.** ***Factor Loadings : Rotated Component Matrix***

| Rotated Component Matrix[a] | | | | |
|---|---|---|---|---|
| | Component | | | |
| | 1 | 2 | 3 | 4 |
| In the future, I will be loyal to [Brand X]. *(loyalty1)* | | | .736 | |
| I will buy [Brand X] again. | | | .804 | |
| [Brand X] will be my first choice in the future. *(loyalty2)* | | | .777 | |
| I will not buy other brands if [Brand X] is available for sale. *(loyalty3)* | | | .784 | |
| Using this brand gets me to think about [Brand X]. *(Eng1)* | | .807 | | |
| I think about [Brand X] a lot when I'm using it. *(Eng2)* | | .775 | | |
| I feel very positive when I use [Brand X]. *(Eng 3)* | | .834 | | |
| Using [Brand X] makes me happy. *(Eng 4)* | | .841 | | |
| I use [Brand X] the most. *(Eng 5)* | | .686 | | |
| I would gladly do this activity again. *(Int1)* | | | | .855 |
| If it were possible to participate in an activity like this again, where I would get discounts for solving tasks, I would gladly do it. *(Int2)* | | | | .628 |
| If possible, I would participate in a similar activity more frequently rather than less frequently. *(Int3)* | | | | .825 |
| Makes me feel that I need to complete things. *(exp1)* | .681 | | | |
| Calls for a lot of effort for me to be successful. *(exp2)* | .685 | | | |
| It feels like participating in a competition. *(exp3)* | .805 | | | |
| It gives me a sense of being directed. *(exp4)* | .806 | | | |
| It gives me an overall playful experience. *(exp5)* | .811 | | | |
| It gives me a sense of social support. *(exp6)* | .762 | | | |

***Note.*** Loyalty *(Brand Loyalty);* Customer Brand Engagement *(Eng);* Online Gamification Experience *(Exp);* Continued Engagement Intention *(Int).*

respondents due to data collection tested using Harman's single-factor test. The results indicated that the first-factor structure accounted for 27.39%, which is < 50% (Podsakoff et al., 2003). The data set discovered that the standard bias method did not impact the results.

To assess the model fit of the measurement model, we analyzed the indices : $\chi^2$ /*df*, CFI, GFI, IFI, NFI, and RMSEA values, which help determine the model fit. The measurement model of the independent and dependent variables examined using CFA describes a reasonably good model fit with $\chi^2$ /*df* (2.06), CFI (0.943), NFI (0.897), IFI (0.944), GFI (0.904), and RMSEA (0.065). The diagrammatic representation of the measurement model is indicated in Figure 3.

### *Data Reliability, Internal Consistency, and Validity Tests*

Composite reliability, inter-item reliability, and convergent validity check the measurement model's reliability and validity. The study passes the composite reliability test as the values are 0.83 and 0.89 for the four constructs, which surpass the suggested 0.6 value. The inter-item reliability was checked by calculating Cronbach's alpha, and

**Figure 3.** ***Path Diagram for the Hypothesized Model***

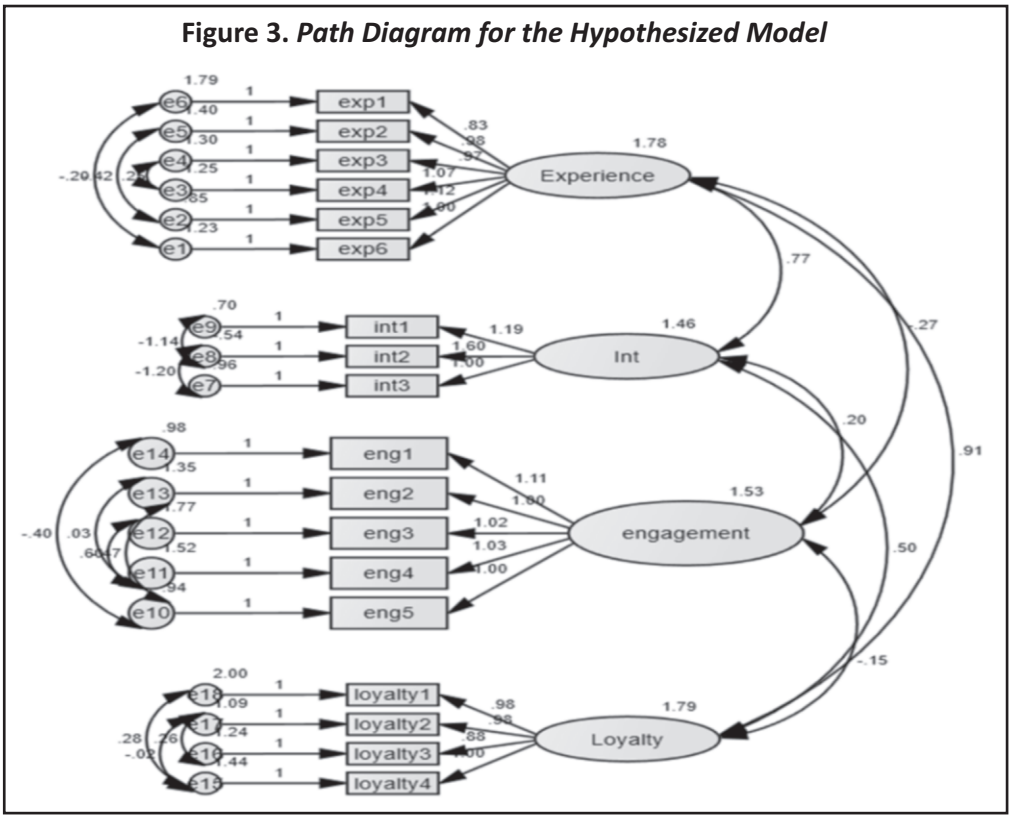



**Table 3.** ***Average Variance Extracted***

| | Estimate | Square of Estimates / Communalities* | Average Variance Extract (AVE) |
|---|---|---|---|
| *loyalty1* | .800 | 0.639547039 | 0.57 |
| *loyalty2* | .795 | 0.632590355 | |
| *loyalty3* | .716 | 0.513333966 | |
| *loyalty4* | .669 | 0.447790407 | |
| *eng1* | .812 | 0.658686447 | 0.65 |
| *eng2* | .754 | 0.568578656 | |
| *eng3* | .805 | 0.648555935 | |
| *eng4* | .855 | 0.730294321 | |
| *eng5* | .692 | 0.478754339 | 0.61 |
| *int1* | .854 | 0.729291305 | |
| *int2* | .642 | 0.41208291 | |
| *int3* | .829 | 0.687552164 | |
| *exp1* | .717 | 0.514008839 | 0.62 |
| *exp2* | .800 | 0.639589535 | |
| *exp3* | .843 | 0.71129561 | |
| *exp4* | .849 | 0.7216126 | |
| *exp5* | .800 | 0.639928817 | |
| *exp6* | .707 | 0.499895521 | |

those items that met the recommended range, that is, between 0.77 and 0.885, were considered (Nunnally, 1994). The next stage included assessment of construct validity, discriminant validity test, and convergent validity methodology. Convergent validity assessed the average variance extracted (AVE). The AVE values also met the acceptable norm of being greater than 0.5 (as depicted in Table 3), which suggest a highly fit model (Fornell & Larcker, 1981). The next stage analyzed the discriminant validity where the AVE values of constructs were related to the square of the correlation estimates. Every construct met the normed AVE values (between 0.000 – 0.220), being greater than the squared inter-construct correlation estimates, thereby supporting the test of discriminant validity. To confirm the face validity of the sample, we approached industry experts (both in academics and corporate) from the marketing field to validate the constructs/variables of the adopted scales. The experts established the correctness of the constructs/variables for the study.

### *Structural Equation Modeling (SEM)*

Structural equation modeling (SEM) was applied to check the credibility of the proposed effects and associations in the structural equational path model. The proposed path of SEM details the online gamification experience as the independent variable. The study establishes relationships among online gamification experience, customer brand engagement, online engagement intention, and brand loyalty. The overall hypothesized measurement model confirms a good model fit, with the indices showing values of $\chi^2/df$ (= 4.564) ; CFI (= 0.895), NFI (= 0.872), IFI (= 0.898), GFI (= 0.974), and RMSEA (= 0.063).

### *Testing of the Hypotheses*

Testing of the hypotheses is conducted with SEM using AMOS 20. We assess the relationship between online gamification experience and continued engagement intention (Ha1), continued engagement intention with consumer brand engagement, and consumer brand engagement with brand loyalty (Ha2 and Ha4). Online gamification experience has a significant positive impact on continued brand engagement with β value (0.473) and ($p$ = 0.00). This result supports Ha1 and indicates that the online gamification experience stimulates millennial consumers' firm, persistent brand engagement intention. The continued brand engagement also significantly impacts brand engagement with β value = 0.232 and $p$-value ($p$ = 0.00). Additionally, brand engagement greatly influences brand loyalty (β = 0.262, $p$ = 0.00), as theorized in Ha2 and Ha4, respectively. The study results confirm that there is no relationship between gameful experience and customer brand engagement ($p$ = 0.200). Also, the relationship between gameful experience and loyalty ($p$ = 0.918) is not established. Hence, we accept the hypotheses H03 and H05, and the hypotheses H01, H02, and H04 are rejected.

## Implications

### *Theoretical Implications*

Theoretically, the research proves that the theory of gamified learning characteristics influences learning outcomes, attitude, and learning behavior. However, with the introduction of new constructs and the proposed model, which involves continued engagement intention, customer brand engagement, and brand loyalty, the current study confirms that gamification experience among the millennials has a positive impact on millennials' intended use (García-Jurado et al., 2019). In totality, 45% of the participants indicated that they had been actively engaged in gamification activity post this pandemic and lockdown period. Firms should take cognizance of technology-enabled gamified experiences. Extant literature has demonstrated that millennials could less trust

brands. Hence, companies should be able to build the correct type of trust and experiences to create a gamified experience, resulting in brand loyalty. An essential consideration in the present study is to check the relationships of millennials' gamification experiences. The results affect continued engagement intention, which involves brand engagement and ultimately results in positive or negative brand loyalty. Therefore, brands should redesign their websites to reaffirm building trust and commitment among the millennials. The study results are in harmony with the findings of Vitkauskaitė and Gatautis's (2018) investigation on the effect of gamification on consumer brand engagement, where the relationship was not robust. This relationship is also not established in the present study. This result confirms that in an emerging market, the millennials of India do not feel engaged with the brands unless they have some intention to continue being engaged with the game. However, as suggested in the literature, the current work does not support the positive relationship between gamification and loyalty (Kim & Ahn, 2017). This analysis proves millennials' intention to continue playing the game. Still, a good experience does not help them indirectly relate to the brands and does not increase their loyalty.

### *Managerial Implications*

Marketers should take cognizance that millennials in an emerging market are generally familiar with the gaming elements through their indirect and direct contact with video games. Hence, the type of user activities aligned will define the maximization of their engagement levels. Marketers have to understand that the characteristics of the gamers, like social status, frequency of online purchases, video game familiarity, contribution towards product reviews, etc., provide the state of flow, which is a vital factor that explains consumer behavior in an environment mediated by technology. This analysis would support marketers in increasing millennials' enjoyable experiences initiated through the company's website itself. These enjoyable experiences can be rewards, competition, and collaboration that affect users' behavioral intentions (García-Jurado et al., 2019). For gamification to be successful, companies should be able to provide an entertaining interface to millennials with a setting that is easier to use to enhance their brand engagement. As millennials are usually familiar with the gaming elements and analyze the gamification influence on the consumers, marketers can look at the reward systems based on their demographic characteristics.

Additionally, at times, millennials may not be concerned about the rewards for repeat purchase behavior. Still, they may consider their individual needs per se. Hence, firms should look at their marketing strategies for creating an online gamification experience. E-commerce firms should conduct segmentation based on the age of the consumers, which would reveal good results.

## Limitations of the Study and Future Research Agenda

In survey-based data studies, confident respondents may not accurately recall instances related to their gamified experiences. Future scholars might adopt backstage databases and dynamic online indicators of websites that provide the gaming history. Investigating the impact of each gamification feature may bring more granularity to the research study. The present study is about the millennials of the Indian economy, and hence, empirical results may vary based on the cultures and the ultimate goal of the service provider. Future scholars might identify gamification interactions across various online brand communities/ cultures to increase the generalizability of the output. The variables that moderate or mediate the relationship between online gameful experiences and brand loyalty may also be studied. Future researchers might also analyze the interaction of demographic variables between online gamification experiences and brand engagement.

## Authors' Contribution

Dr. Mallika Srivastava conceived the idea and developed a quantitative design to undertake the empirical study. Dr. Semila Fernandes extracted highly reputed research papers, filtered these based on keywords, and generated concepts and theories relevant to the study design. Dr. Mallika Srivastava verified the analytical methods and supervised the study. Data collection was conducted by Dr. Mallika Srivastava and Dr. Semila Fernandes in English. The numerical computations were done by Dr. Mallika Srivastava using SPSS 20.0. Dr. Semila Fernandes wrote the theoretical and managerial implications. Both the authors edited and finalized the manuscript.

## Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.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