



Don't make ads, make TikTok's: media and brand engagement through Gen Z's use of TikTok and its significance in purchase intent

Jose A. Flecha Ortiz¹ · María De Los M. Santos Corrada^{2,3} · Evelyn Lopez¹ · Virgin Dones¹ · Vivian Feliberty Lugo¹

Revised: 20 March 2023 / Accepted: 27 April 2023 / Published online: 18 May 2023
© The Author(s), under exclusive licence to Springer Nature Limited 2023

Abstract

New social media platforms, such as TikTok, are characterized by dynamic content that provides Generation Z users with a sense of connection and higher engagement rates than other social media platforms. The particularities of Generation Z as consumers have changed the way brands look for ways to drive engagement and forms of interaction on social networks (SNS). This article proposes a model to analyze the passive use of TikTok, and how it impacts the media engagement in users of Generation Z. In addition, it analyzes how media engagement impacts brand engagement through affective, cognitive, and behavioral dimensions. Finally, we present how these variables affect purchase intention. The results reflect that the motivations for interactivity and the drivers of those motivations significantly impact consumer engagement and that perceptual psychology plays a determining role in achieving engagement with the medium. The study identified that once engagement with the brand occurs, interactivity plays an active role in decision-making. This study makes significant contributions to the literature on consumer engagement and marketing management.

Keywords Consumer engagement · Media engagement · Brand engagement · Purchase intention · Passive usage

Introduction

Since its launch in 2012, under Byte Dance, TikTok has had a significant impact on its audience; today, it has over one billion users worldwide, making it the leading social network (SNS) (Statista 2021). Zuo and Wang (2019) detail that TikTok's audience is divided into ordinary people, influencers,

and brands. Specifically, ordinary people encourage users to produce content to satisfy their own psychological needs based on their self-presentation. Some companies generate content to close this gap with younger users (Zuo and Wang 2019). However, the literature on these new interactive media is limited. According to Business Portal Medium (2020), TikTok maintains unique characteristics as a platform. It provides users with a sense of connection and generates high engagement, as it allows them to be expressive. TikTok shows that results in a constant and relevant flow of information, making the platform addictive. This is because TikTok accurately records the user behavior. The decentralized algorithm was optimized to select videos according to the user's personal preferences. This makes it easy to connect with people all over the world. TikTok is an SNS that offers short videos, creative music, and fun challenges and seeks interaction from its users (Wang et al. 2019).

The TikTok for Business (2022) portal explains that social platforms rank first in terms of advertising equity. Their data show that 92% of their users interact with brands. Where they provide companies to unleash the creative side of the brand, throughout an immersive world, without judgment or prejudice, where there is an audience for each voice, under the slogan "*Don't Make Ads, Make TikToks.*" The

✉ Jose A. Flecha Ortiz
flechaj1@uagm.edu

María De Los M. Santos Corrada
maria.santos19@upr.edu

Evelyn Lopez
elopez231@uagm.edu

Virgin Dones
vdones@uagm.edu

Vivian Feliberty Lugo
vfeliberty1@email.uagm.edu

¹ Department of Business, Tourism and Entrepreneurship, Universidad Ana G. Mendez-Gurabo Campus, PO Box 3030, Gurabo, PR 00778-3030, USA

² San Juan, Puerto Rico

³ School Graduate in Business Administration, Universidad de Puerto Rico-Recinto de Río Piedras, San Juan, Puerto Rico



demographic profile of TikTok is dominated by Generation Z, where global data indicate that 60% of users are women and another 40% are men (Iqbal 2021), and spend up to one hour a day using the social application (Statista 2021). Generation Z is the generational group born between 1997 to 2009. Generation Z is also known as a centennial; they are considered true digital natives (Kartajaya et al. 2021). Generation Z coexists in different scenarios, and the technological area is an essential part of all these events (Singh and Dangmei 2016). Generation Z is characterized by seeking alternatives for success where SNSs become a critical part of their lives as a link for self-expression and social interaction (Singh and Dangmei 2016; Cho et al. 2018). They seek social validation through Facebook "likes" and comments on their posts on social platforms, which makes them feel like they are part of a community (Chua and Chang 2016; Henzel and Håkansson 2020; Andreassen et al. 2017; Turner 2015).

From a consumer perspective, Generation Z is distinguished by having a direct, informal, and individual way of communicating with brands on SNS (Southgate 2017). Therefore, they expect to access and evaluate information before making their decisions. A distinguishing factor of Generation Z is the consumption of a product and its link with brands; they observed it as an expression of individual identity. Thus, they do not want annoying advertising but integrate and expect brand co-creation (Singh and Dangmei 2016; Cho et al. 2018). Considering the particularities of Generation Z as consumers, they could say that it has changed the way brands seek ways to interact with their consumers on SNSs. Rangaswami et al. (2020) detail that nowadays, companies must identify and satisfy their consumers' needs through the core functionality of an SNS platform. It should aim to facilitate interaction, thus achieving significant cost reduction in marketing activities.

This behavioral change to marketing tactics in younger groups could explain how TikTok's content model enables linking its users with brands. Ruiz (2021) concluded that the TikTok audience is more receptive to brand messages and calls to action, as it is directly related to the adequate sympathy it produces with the content of its users. This results in a consumer engagement rate of 15%, which is the highest among the leading SNS platforms. This is associated with its users wanting brands to meet where they are on TikTok. Both paid and organic content are perceived as less intrusive and do not interfere with the TikTok experience (TikTok for Business, 2022). The content delivery method creates continuous engagement cycles (Ruiz 2021). However, how consumer engagement acts in Generation Z through new platforms such as TikTok is a topic that has not been addressed in the literature; therefore, further research is required. In addition, how engagement works and its analysis dynamics vary according to platform type (Unnava and Aravindakshan 2021).

Engagement theory began with studies on distance learning (Kearsley and Shneiderman 1998) and business (Csikszentmihalyi 1997). Later, it evolved into disciplines such as communication (Kumar et al. 2010a, b) and psychology (Achterberg et al. 2003; Kumar et al. 2010a, b). In the marketing field, the seminal work of Algesheimer et al. (2005) postulated that engagement is a force that influences consumer loyalty and, thus, the continuity of brand consumption. Various perspectives of engagement concur in analyzing psychological and behavioral attributes through a person's connection, interaction, and participation. Implications at individual, organizational, and societal levels (Willis 2007; Kahn 1990; Kearsley and Shneiderman 1998). From a marketing perspective, it analyzes the psychological state that is produced under interactive and co-creative experiences of the customer with a focal agent/object (a brand) (Brodie et al. 2011) and contemplates voluntary brand contributions characterized by specific levels of cognitive, cognitive, and behavioral activities (Hollebeek et al. 2016, 2011; Jaakkola and Alexander 2014; Brodie et al. 2011).

Bilro and Loureiro (2020) argue that the concept of consumer engagement has evolved, establishing new definitions and clarifying that there is no unified conceptualization in the literature. In addition, they propose a research model to be used in future research where consumer engagement is studied, emphasizing the analysis of motivations and drivers, including interactivity factors that play a role in decision-making. This study addresses two relevant gaps in the literature, as suggested by Bilro and Loureiro (2020). First, it analyzes how consumer interactivity in the engagement process indexes the participation processes. Second, to explore how online brand community engagement platforms focus on existing third-party platforms, such as TikTok, allow consumers to contribute to a focal object, such as a product or service. According to Bilro and Loureiro (2020), this second gap is a less-explored area of academic literature.

This study is relevant given the growing research interest in analyzing consumer brand dynamics. How do the consequences of consumer engagement have direct effects on behavioral measures? In addition, SNSs are based on different types of experience and are experienced uniquely and differently across platforms. Thus, the rapid evolution of how consumer engagement acts and its typologies is ideal for analyzing consumer dynamics and how they relate to a brand (Bilro and Loureiro 2020). Thus, through the Theory of Consumer Engagement, this study tests part of Bilro and Loureiro's (2020) model by analyzing whether media engagement and consumer brand engagement trigger a response to purchase intention. The proposed structural model examines whether passive use of TikTok by Generation Z users significantly affects engagement with the medium. Second, it explores whether media engagement affects consumer brand engagement (CBE). Third, we



analyzed whether CBE directly impacts the purchase intention of Generation Z consumers. This study proposes a structural model to analyze two types of consumer commitment through the effects of engagement and its dimensions. This study is segmented into two analyses and offers important contributions to the theory and practice of consumer engagement and its direct effects on purchase intent. Both analyses provide essential insights into consumer engagement in new communicative environments such as TikTok. The following section begins with a background of the literature and discusses methodological rigor, its discussion, contributions, limitations, and future research.

Literature review

Passive use of TikTok

SNS use is defined as engagement with an audience that facilitates interactivity, interaction, and collaboration (Song and Yoo 2016; Chi 2011). SNS use can be analyzed actively or passively (Shao 2009; Ruano and Maca 2017; Yue et al. 2021). First, passive use is defined as the consumption of content without direct participation in social interactions (Verduyn et al. 2021, 2017). Passive use was initially explained using monitoring. SNS users analyze and compare their lives with those of others (Shao 2009; Whiting and Williams 2013). Other characterizations of passive use include performing any other activity (watching videos, news, etc.) where users consume content but do not interact with others on SNSs (Gerson et al. 2017). Studies have clarified that the analysis of passive use acts on various motivational factors. With TikTok, a limited group of studies on Generation Z concluded that passive use is characterized by relaxation factors, stress reduction, and day-to-day pressures (Wang et al. 2019; Omar and Dequan 2020). Passive use is defined as a person's minimum level of engagement with an SNS (Schivinski et al. 2016). Thus, in this study, the passive use of TikTok was analyzed through relaxation factors, reduction of day-to-day stresses and strains, and how these factors convert it into active use.

How a user engages with the medium through passive use generates power to significantly actuate active use (Verduyn et al. 2020, 2017; Dienlin 2020; De Vries, 2014). Active use is defined as a user's participation in an SNS and is explained by intrinsic and extrinsic motivations (Ruano and Maca 2017; Shao 2009). Therefore, passive use significantly affects the media engagement of SNS users. Short videos that help users find sensory stimuli characterize TikTok, creating psychological pleasure. Its decentralized algorithm provides a greater reach of high-quality content in multiple ways and topics that motivate users to participate (Omar and Dequan 2020). This is in addition to TikTok's ease of

attracting new followers to its users, which satisfies their motivation for self-expression and socialization. Allowing users to receive more reactions or comments than on other SNSs reduces the quality and quantity of the content, regardless of the number of followers they have (Qiyang and Jung 2019; Omar and Dequan 2020).

This experience with TikTok also enables and facilitates virtualization of user content. This leads to an exponential increase in the number of followers (Xiao et al. 2019; Yang et al. 2019). Thus, once the user maintains media engagement, various forms of Generation Z participation are explained by *experience factors*, *personal engagement* (self-expression), and *social-interactive engagement* (Omar and Dequan 2020; Harrigan et al. 2021). Other studies have shown that passive use affects engagement with the environment, where various forms of participation are motivated to establish visibility and links with other users on SNSs (Bucknell-Bossen and Kottasz 2020; Cho et al. 2018; Xiao et al. 2019; Erz et al. 2018; Tang 2019). It is against this background that we posit:

H₁ The passive use of TikTok significantly affects media engagement among Generation Z users.

Media engagement

Media engagement is defined as any experience of liking or disliking a specific medium (Calder and Malthouse 2008, 2018). This concept emerged from the seminal work of Calder and Malthouse (2008), who analyzed the psychological experience of consumers using media and determined that engagement with media arises from empathy. Di Gangi and Wasko (2016) explain that media engagement is experienced motivationally and has the power to affect a brand's response. Media engagement in SNSs encompasses social interactions between users, which will be observed according to the attractiveness and characteristics of the social platform (Pralhad and Ramaswamy 2004). Bilro and Loureiro (2020) detail that media engagement is a multidimensional variable in which *personal engagement*, *social-interactive engagement*, and *experience* figure are three relevant dimensions to explain media engagement.

On the one hand, *personal engagement* is intrinsically explained through the degree of participation and communication that an individual has within an SNS (Oh et al. 2017; Castillo et al. 2021). Then, *social-interactive engagement* is both intrinsically and extrinsically motivated, and this encompasses individuals' participation in formal and informal collective activities (Pagani and Mirabello 2011; Kim et al. 2016; Zhang et al. 2011). *Experience* refers to an immersive state of content consumption (Boyd 2010). Social interactions between users and how the characteristics of the social platform influence users have been analyzed (Pralhad



and Ramaswamy 2004; Goldfarb et al. 2015). In this study, media engagement is analyzed through its dimensions of *personal engagement*, *social-interactive engagement*, and *experience* to observe whether it affects brand engagement in TikTok users in Generation Z.

The literature highlights that *personal engagement* is associated with stimulation (Oh et al. 2017) because of the need to receive likes (Khan 2017; Bucknell-Bossen and Kottasz, 2020), the feeling of being noticed (Castillo et al. 2021), and participation as a form of self-expression (Marwick 2013; Sepp et al. 2011). Conversely, *social-interactive engagement* reinforces social capital by linking relationships and implies activity and interaction (Meservy et al. 2019; Shane-Simpson et al. 2018; Naeem et al. 2021). In terms of *experience*, we analyzed how utilitarian (utility, information seeking, and privacy) and hedonic (fun, rewarding, and maintaining pleasant experiences) values act. Utilitarian and hedonic values have the power to explain how engagement with the environment is linked to brand engagement (Lee and Wu 2017; Leftheriotis and Giannakos 2014; Chahal et al. 2020).

Studies from various perspectives have highlighted that *personal* and *social-interactive engagement* (Bailey et al. 2021; Ismail et al. 2020; Jones and Lee, 2022) and *experience* (Hollebeek et al. 2020; Chahal et al. 2020; Khan et al. 2020; Kumar et al. 2022) facilitate brand engagement. Although the TikTok literature is limited, some studies have concluded that interactive and usability elements (Feng et al. 2019) facilitate faster engagement, as Generation Z users can receive a higher proportion of reactions or comments (Yang et al. 2019; Xiao et al. 2019) than other social platforms. Experience, social interaction, and self-expression significantly impact brand engagement (Omar and Dequan 2020; Zuo and Wang 2019). TikTok's decentralized content model explains this phenomenon. The platform can satisfy both intrinsic and extrinsic motivations. Therefore, this content model can explain high user engagement with TikTok. This is because of the following reasons:

H₂ Media engagement significantly affects consumer brand engagement in Generation Z TikTok users.

Consumer brand engagement

Consumer brand engagement (CBE) on SNSs refers to user behaviors beyond simple actions, such as viewing or reading (Paine 2011; France et al. 2016). The CBE study emerges in relationship marketing and the analysis of consumer brand relationship studies (Palmatier et al. 2006; Fournier 1998). CBE is defined as a psychological state that occurs during the interactive and co-creative experiences of consumers with products or brands in a digital environment (Brodie et al. 2013; France et al. 2016). Hollebeek et al. (2014)

explain that the psychological state of CBE is explained by its (a) cognitive (thoughts of the brand), (b) affective (feelings toward the brand), and (c) behavioral (time a consumer spends with a brand) dimensions. The psychological state of the relationship between consumers and brands is directly driven by the interactions between Hollebeek et al. (2014) and Brodie et al. (2013), Hollebeek (2011), and Hollebeek and Macky (2019). Thus, interactivity has direct (purchase intention) or indirect (referrals, influence, and feedback) effects on consumer behavior (Bilro and Loureiro 2020). Thus, this study analyzes brand engagement through its cognitive, affective, and behavioral dimensions, and how it directly affects purchase intention.

Purchase intention is defined as consumers' willingness to purchase a product or service (Aluri et al. 2015; Alalwan 2018). The literature shows that the three dimensions of CBE directly impact purchase intentions in Generation Z consumers (Florenthal 2019; Arghashi and Arsun-Yuksel 2022; Bazi et al. 2020; Djafarova and Bowes 2021; Klein and Sharma 2022). Other authors highlight that in Generation Z, cognitive processing is the most significant and explains purchase intention (Molina-Prados et al. 2021). Klein and Sharma (2022) stress that, on the contrary, cognitive and affective processing directly influence purchase behavior and not behavioral processing. Toni and Mattia (2021) stress that the brand hashtag challenge does not directly trigger a purchase but activates interest in the product.

Lontoh et al. (2022) present how engagement behaviors in TikTok facilitate their purchase decisions. TikTok's ease of engaging users with brands improves offers and engagement, and interactivity is explained by purchase intention (Rangaswami et al. 2020; Xiao et al. 2019). However, the extensive literature does not offer a clear delineation of how brand engagement acts on a platform, which explains how each dimension shapes the CBE variable. Against this background, we propose the following hypothesis:

H₃ Consumer Brand engagement impacts interactivity among Generation Z TikTok users, directly affecting purchase intent.

Method

We tested the conceptual model in Fig. 1 using partial least squares structural equations (PLS-SEM) on 403 active users of the social network TikTok belonging to Generation Z and residents of Puerto Rico. Generation Z is a group born between 1997 and 2009 (Kartajaya et al. 2021). The participation criteria were established as being male or female, between 21 and 24 years of age, and an active user of TikTok. Limiting this age group was justified because, according to research ethics regulations in



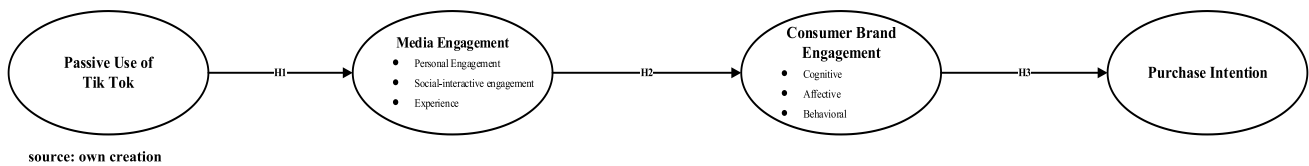


Fig. 1 Reserch model

the USA (IRB), all participants under 20 years of age require parental consent to participate. Additionally, the choice of this age group overcomes the biases of segmented sampling and coverage (Heckathorn 1997; Sabin et al. 2005). Sabin et al. (2005) detail that the application of segmented sampling reduces bias in the sample by applying an ethnographic evaluation of the population to be studied. In addition, choosing a specific age segment reduces coverage bias and increases participants' representativeness.

The study employed simple random sampling through an electronic survey sent via SNS (Facebook and Instagram) and used a database owned by researchers that had been developed for research purposes. To maintain the quality and rigor of the data, we employed non-replacement sampling. The survey was protected and coded so that it could be accessed only on a single occasion. If a participant dropped out or took another action, the survey was immediately rejected, and the participant could not reaccess it. Malhotra (2020) explained that non-replacement sampling is more meaningful than other sampling techniques. Non-replacement sampling does not allow the same population to enter the sample more than once.

To determine the population to participate in, we analyzed the census estimates for Puerto Rico. Data from the Puerto Rico Institute of Statistics (IDEPR) (2021) reflects a finite population of 222,186 inhabitants between the ages of 21 and 24. Subsequently, we set a confidence level of 95% and a margin of error of 5% with 384 potential participants. The data were collected between March and September 2021 and culminated in 895 surveys, of which only 403 were valid for analysis. Demographics by participation were relatively consistent with the official statistics of TikTok users. TikTok's comprehensive data indicate that its audience is dominated by Generation Z (Statista 2021). With a demographic that is 60% female-dominated and another 40% male-dominated (Iqual 2021). In addition, global data show that users spend up to one hour per day using social applications (Statista 2021). Thus, 66.50% of the participants were women (n = 268), and 33.50% were men (n = 135). Moreover, the time spent using TikTok reflected that 56.33% (n = 227) spent one hour daily. A total of 29.28% (n = 118) spent up to two hours a day, and 14.39% (n = 58) spent 3 h or more (Table 1).

Table 1 Demographic sample. Source: Own creation with survey data

	%	n = 403
Women	66.50	268
Male	33.50	135
Time of use		
1 hour daily	56.33	227
To 2 hours a day	29.28	118
3 hours or more	14.39	58

Research instrument

To assess these constructs, we used a combination of the literature-based scales adapted to the context of the TikTok content model. After pre-testing 30 participants with the same inclusion criteria for the study and eliminating three indicators that did not show reliability (*factor loading* < 0.70), the final version had 36 items on a five-point Likert scale. Participants responded that 1 strongly disagreed to 5 strongly agreed with each statement. The treatment for each variable began with the passive use of TikTok, which counted four items using the scale proposed by Gerson et al. (2017) and edited according to the TikTok content model. Media engagement had 15 items, segmented into five items for personal engagement and five for interactive social engagement. The scales used to assess the items were recommended by Pagani and Mirabello (2011), Khan (2017), and Sundar and Limpingos (2013). The third dimension consisted of five items. According to the scales proposed by Calder and Malthouse (2008), these items analyze how utilitarian and hedonic values act. The instrument's construction continued with the consumer brand engagement variable with 11 items segmented by each dimension. Four items were used for cognitive processing, three for affective processing, and four for behavioral processing. Each statement was edited according to the TikTok content model of the instrument proposed by Hollebeek et al. (2014). Finally, the purchase intention variable had six items. These new scales analyze the intention, motivation, or willingness to purchase products through interaction with the brand in TikTok (Aluri et al. 2016; Allawah 2018).



Validity and reliability of the study

The analysis performed for the measurement model observed in Table 2 reflects that the values of the factor loading, alpha coefficients, and composite reliability reflected values above the criterion of 0.70 (Hair et al. (2020) and Henseler et al. (2009)). As for AVE values, all latent variables reflected values above the criterion of 0.50 (Hair et al. (2020)). The values for the HTMT discriminant validity test reflected in Table 3 are according to the criterion of 0.90 or less (Henseler et al. 2014; Hair et al. 2020), where these data allow us to conclude that there are no problems between variables that could have the same meaning. These data reflect the high validity and reliability of the results (Hair et al. 2020).

Confirmatory composite analysis (CCA)

After analyzing the reliability and validity of the study, we analyzed whether the results of the study were confirmatory. *Confirmatory composite analysis* (CCA) was used for this analysis. The analysis continued by observing whether collinearity existed. To analyze this, *variance inflation factor* (VIF) values were calculated. The results indicated that the VIF values for all variables were at a variance inflation level of 1.0 and a tolerance level of 1.0. The variance inflation data were not greater than 5.0, and the tolerance level was not greater than 2.0. The structural model is not a limitation in estimating the results (Hair et al. 2020). In Fig. 2, the research model shows a high variance explained by endogenous variables. These reflect higher values of $R^2 > 0.50$ (Hair et al. 2021). When comparing these results with the data from Q^2 (Blindfolding), the same reflected values greater than $Q^2 > 0.27$. The research model maintains high predictive power (Hair et al. 2020). All data for f^2 were more outstanding than 0.35, reflecting that each observed variable significantly affects the exogenous construct on its corresponding endogenous construct (Hair et al. 2021). The data in Figs. 2 and 3 reflect the data of a high correlation $\beta > 0.70$ and high significance scores. This supports nomological validity, as the results are consistent with the theoretical direction, sample size, and significance of correlations (Hair et al. 2020; Adcock 2001). At the end after analyzing the factor loading values, alpha coefficients, composite reliability, discriminant validity (HTMT) (Tables 4, 5, and 6), collinearity analysis, the values of R^2 y Q^2 values, predictive relevance f^2 , and supporting nomological validity lead to the conclusion that the study fulfills each step to support that the results to be discussed are also confirmatory, according to the *confirmatory composite analysis* (CCA) criterion (Hair et al. 2020).

Hypothesis testing

The analysis in Fig. 2 supports the hypothesis where the data reflect that the passive use of TikTok significantly affects media engagement in Generation Z users ($H_1 \beta = 0.724$; $p < 0.01$; $t = 29.864$ $t > 1.960$). A significant result can be seen when analyzing whether media engagement affects ($H_2 \beta = 0.804$; $p < 0.01$; $t = 31.920$ $t > 1.960$) consumer brand engagement in Generation Z TikTok users. Furthermore, when analyzing whether brand engagement triggers interactivity in generation Z TikTok users and its direct effect ($H_3 \beta = 0.773$; $p < 0.01$; $t = 33.266$ $t > 1.960$) on purchase intention. Thus, these hypotheses were supported.

Secondary analysis

The second part in Fig. 3 delves into analyzing how the passive use of TikTok affects each dimension of media engagement. On the other hand, we analyzed whether the three dimensions of *personal engagement, social-interactive engagement, and experience* are determinant variables that explain the variable media engagement (Bilro and Loureiro 2020) among TikTok users in Generation Z. Next, we analyzed whether engagement with the medium significantly affects *cognitive, affective, and behavioral* factors in CBE. To observe whether these three dimensions explain CBE among TikTok users in Generation Z (Hollebeek et al. 2014; Brodie et al. 2013; Hollebeek 2011; Hollebeek and Macky 2019). For this analysis, the following hypothesis was proposed:

H₄ The passive use of TikTok by Generation Z users significantly affects media engagement through its dimensions.

H_{4a} Personal engagement.

H_{4b} Interactive social engagement.

H_{4c} Experience.

H₅ Media engagement in Generation Z TikTok users is a multidimensional variable that its dimensions explained:

H_{5a} Personal engagement.

H_{5b} Interactive social engagement.

H_{5c} Experience.

H₆ Media engagement in Generation Z TikTok users significantly affects consumer brand engagement across its dimensions:



Table 2 Validity and reliability of the study. *Source:* own creation with SMART-PLS data

	Factor loading	Alpha	Compos- ite reli- ability	AVE	References
<i>Passive use</i>		0.9	0.931	0.774	Gerson et al. (2017)
My stress is reduced when I use TikTok	0.754				
I relax when I use TikTok	0.899				
TikTok allows me to get a wide variety of information	0.927				
I escape from the pressures of the day when I view content on TikTok	0.927				
<i>Media engagement</i>		0.944	0.947	0.548	Pagani and Mirabello (2011)
<i>Personal engagement</i>	0.79	0.895	0.923	0.705	
I participated in the challenges to see if my video would go viral	0.895				Khan (2017)
I like expressing myself through TikTok	0.841				
I like the idea of my video going viral through TikTok	0.868				Sundar and Limperos (2013)
I am interested in how many people like my TikTok videos	0.8				
I use TikTok to express myself					
<i>Social-interactive engagement</i>					Calder and Malthouse (2008)
It's enjoyable to create content to share on the app	0.774	0.837	0.885	0.607	
I have shared videos by participating in challenges	0.75				
TikTok gives me the power to convey messages to my followers	0.854				
On TikTok, I can connect with others	0.784				
I communicate with other users through TikTok	0.727				
<i>TikTok experience</i>					
Sharing my personal experiences on TikTok is rewarding	0.711	0.826	0.878	0.591	
Using TikTok is convenient for me	0.743				
I use TikTok as kept well informed about the latest trends	0.781				
The experience though TikTok is very much like real life	0.805				
TikTok allows me to review the opinions of others before making decisions	0.8				
<i>Consumer brand engagement</i>		0.914	0.928	0.541	Hollebeek et al. (2014)
<i>Cognitive</i>					
TikTok's brand videos capture my attention	0.75	0.782	0.86	0.606	
I'm a follower of my favorite brands on TikTok	0.846				
I have reviewed some of the products that TikTok influencers use	0.802				
Using TikTok has allowed me to save money when shopping	0.71				
<i>Affective</i>					
TikTok's brand videos are fun	0.825	0.744	0.869	0.688	
I like following #HashtagChallenges of product or service brands	0.811				
TikTok allows me to engage with brands	0.852				
<i>Behavioral</i>					
It is fun to participate in creating brand challenge videos	0.81	0.809	0.875	0.635	
I have shared branded content from TikTok	0.79				
I like to follow the #HashtagChallenges of product or service brands	0.779				
I have shared videos of my favorite brands	0.808				
<i>Purchase intention</i>		0.942	0.954	0.776	Aluri et al. 2016 and Alalwan 2018
I am motivated to buy by the reasonable published offers on TikTok	0.875				

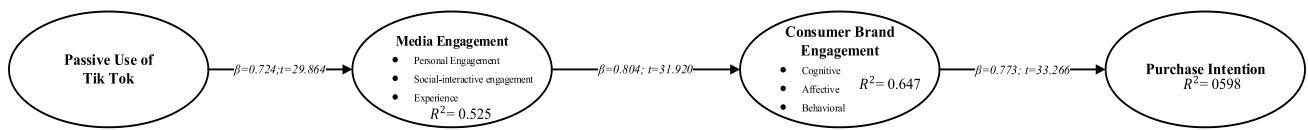


Table 2 (continued)

	Factor loading	Alpha	Compos- ite reli- ability	AVE	References
Interactive branded content on TikTok has motivated me to buy products	0.896				
The more creative the branded content on TikTok is, the more it motivates me to buy	0.872				
The creativity of advertising videos on TikTok has motivated me to buy	0.9				
Interaction with #HashtagChallenges from brands has motivated me to buy	0.861				
I have been inspired to buy a product/service when I see a TikTok influencer promoting it	0.88				

Table 3 Discriminant validity.
Source: own creation with SMART-PLS data

	Media engage- ment	Consumer brand engagement	Purchase inten- tion	Passive use
Media engagement				
Consumer brand engagement	0.863			
Purchase intention	0.709	0.826		
Passive use	0.787	0.735	0.592	



source: own creation with PLS-SEM data

Fig. 2 Research results

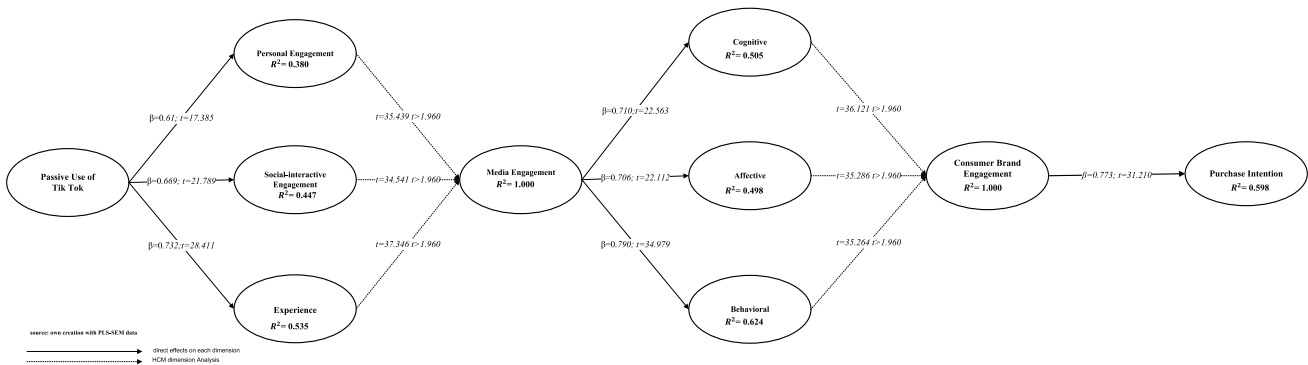


Fig. 3 Research results with HCM analysis

H_{6a} Cognitive.

H_{6b} Affective.

H_{6c} Behavioral.

H₇ The psychological state that produces consumer brand engagement in Generation Z TikTok users is a multidimensional variable and explained by its dimensions:



Table 4 Analysis R^2 vs. Q^2 . Source: own elaboration with SMART-PLS Q^2 = the effect on the sample 0.02 small; 0.15 medium; and 0.35 > large (Hair et al. 2020).

	R^2	Q^2 (=1-SSE/ SSO)
Media engagement	0.525	0.279
Brand engagement	0.647	0.344
Purchase intention	0.598	0.458

Table 5 Analysis for f^2 . Source: own elaboration through SMART-PLS data. f^2 =0.02 low effect, 0.15 medium effect, and 0.35 or greater large effect (Hair et al. 2020)

	Media engagement	Brand engagement	Purchase intention	Passive use
Media engagement	1.831			
Brand engagement		1.485		
Purchase intention			1.104	
Passive use				1.104

Table 6 Variance inflation factor—VIF

	Media engagement	Brand engagement	Purchase intention	Passive use
Media engagement	1.000			
Brand engagement		1.000		
Purchase intention			1.000	
Passive use				1.000

H_{7a} Cognitive.

H_{7b} Affective.

H_{7c} Behavioral.

Results

The results to the proposed hypotheses reflect that the passive use of TikTok in Generation Z users significantly affected media engagement through its dimensions of H_{4a} personal engagement ($\beta = 0.61$; $p < 0.01$; $t = 17.385$ $t > 1.960$), H_{4b} social-interactive engagement ($\beta = 0.669$; $p < 0.01$; $t = 21.789$ $t > 1.960$), and H_{4c} experience ($\beta = 0.732$; $p < 0.01$; $t = 28.411$ $t > 1.960$). Therefore, the hypotheses were supported. The hierarchical component model (HCM) method in PLS-SEM was used to analyze the dimensions of media engagement within the structural

model and determine how each variable acts. HCM analysis within the structural model reduces the number of relationships, providing a detailed understanding of how each dimension acts as a first-order variable (Hair et al. 2018). The data for each dimension were analyzed by running the repeated indicator approach proposed by Ringle et al. (2012). The level of significance was analyzed through significance levels according to Bootstrapping data (Hair et al. 2012, Hair et al. 2018). Where the results support the hypothesis establishing that media engagement is explained firstly by experience ($t = 37.346$ $t > 1.960$), followed by personal engagement ($t = 35.439$ $t > 1.960$), and finally by social-interactive engagement ($t = 34.541$ $t > 1.960$) so the hypothesis is supported.

Continuing with the analysis, we analyzed whether media engagement in Generation Z TikTok users significantly affects engagement with the brand through its dimensions: H_{6a} cognitive ($\beta = 0.710$; $p < 0.01$; $t = 22.563$ $t > 1.960$), H_{6b} Affective ($\beta = 0.706$; $p < 0.01$; $t = 22.112$ $t > 1.960$) and H_{6c} behavioral ($\beta = 0.790$; $p < 0.01$; $t = 34.979$ $t > 1.960$) where the data support the results to the hypotheses raised. Finally, we analyzed whether the cognitive, affective, and behavioral dimensions are multidimensional variables that explain a brand's engagement. The *hierarchical component model* method was used, in which the CBE variable was explained first by the cognitive factor ($t = 36.121$ $t > 1.960$), then by the affective factor ($t = 35.286$ $t > 1.960$), and finally by the behavioral factor ($t = 35.264$ $t > 1.960$). Thus, this hypothesis is supported.

Conclusions, discussion, and theoretical implications

The typologies of consumer engagement have brought about the need for studies that analyze the actions and responses of consumers through various interactivity factors (Grewal et al. 2017). Our research focused on how the passive use of TikTok triggers *Media Engagement* in Generation Z users. We also focused on observing whether *Media Engagement* significantly affected CBE. The purchase intention directly explains the interactivity between the consumer and CBE. We then analyzed *how passive use* directly affects the dimensions of *personal engagement, social-interactive engagement, and exclusivity*. How *Media Engagement directly affects the cognitive, affective, and behavioral dimensions of CBE*. Finally, the explanatory power of each dimension of *Media Engagement and CBE* within the structural model was analyzed.

This study makes a significant contribution to the literature on consumer engagement. Theoretically, engagement studies provide individual, organizational, and societal implications (Willis 2007; Hox 2010; Kahn 1990; Kearsley



and Shneiderman 1998). At the individual level, our research reflects that consumer engagement on SNSs starts with passive use. Active use is then triggered, which is explained by the interactivity motivations of Generation Z users. Once active use is activated, media engagement is achieved. Second, this study illustrates that perceptual psychology explains how passive usage and interactivity motivations trigger *Media Engagement*. The limited literature shows that passive use of TikTok contributes to Generation Z users finding different sensory stimuli, such as reducing stress and relaxation, and creating psychological pleasure through viewing short, easy, and fun videos. Therefore, these methods of finding sensory stimuli and psychological pleasure align with perceptual psychology by triggering the notion of affordability in the user. Therefore, visual stimulation suggests new ways in which users interact and act (Gibson 1986, 2015). It explained how experience dimensions and active use satisfy personal engagement and social-interactive engagement motivations, manifesting why TikTok maintains higher media engagement than other social media.

The societal-level implication and the results of the study support that social interaction on SNSs affects social interactions in different contexts. These results differed from those reported by Rosette et al. (2012) and Mok et al. (2010). This finding emphasizes that every dimension of *Media Engagement* satisfies intrinsic and extrinsic motivations in Generation Z. Thus, easy bonding with other TikTok users provides a different form of social validation. Interestingly, we will observe social validation in Generation Z users through the amount of "likes" and comments they receive through their participation in TikTok. The results imply a social and psychological change in Generation Z. Since the need to receive "likes" comments and others will make users feel that they are part of a community (Chua and Chang 2016; Henzel and Håkansson 2020; Andreassen et al. 2017, Turner 2015). We emphasize that Generation Z seeks to satisfy different sensory stimuli, and that the experience dimension explains how users' psychological pleasure is satisfied. Therefore, the psychological pleasure produced by TikTok requires less cognitive effort, leading to more significant distraction, relaxation, and enjoyment (Sundar 2000; Sundar and Limperos 2013). In addition, TikTok enables the desire for personal expression, leading the user to seek social validation through *social-interactive engagement*. Therefore, their motivations for escapism, social interaction, and self-expression influence how each dimension of *Media Engagement* acts, and how it affects *CBE*. This psychological pleasure is explained from the perspective of behaviorism psychology, since media engagement activates new stimuli where new SNS behavioral patterns are determined by various forms of social learning provided by platforms, such as TikTok.

Bilro and Loureiro (2020) explained that *Media Engagement* is a psychological experience of consumers when

consuming media. In addition, interactivity through media allows consumers to play different roles in the *engagement* process. In addition, from the point of view of SNS, the level of sympathy and connection produced by *Media Engagement* implies a different form of *engagement*, which directly affects *CBE* (Bilro and Loureiro 2020), and interactivity leads the user to purchase intention. At the organizational level, this study provides an implication that explains how interactivity through participation with the brand allows consumers to contribute to behavior. This contribution is significant as it is one of the least explored areas in the academic literature on *Consumer Engagement* (Bilro and Loureiro 2020). Brands are part of the online community, and once *CBE* is triggered through cognitive, affective, and behavioral factors, the interactivity between the user and the brand directly impacts purchase intention. TikTok explains this fact generates high-quality content in multiple ways and topics that attract users. Therefore, combining social communication, various interactive alternatives, and integrated marketing communication allows for achieving efficiency to meet user needs (Tang 2019; Xu et al. 2019; Xiao et al. 2019).

The results showed that the behavioral factor was the most significant dimension affected by *Media Engagement*. Generation Z is characterized by not wanting intrusive advertising but integrated advertising, so they expect co-creation from brands. Therefore, Generation Z expects to access and evaluate information as they see consumption and their attachment to brands as a form of expression of individual identity (Southgate 2017; Thomas et al. 2018). The behavioral factor through utilitarian and hedonic satisfaction explains how content is processed and perceived (Xu et al. 2012; Li et al. 2015). Moreover, the content model employed by TikTok brands is fun and integrates user participation through hashtag challenges and other non-invasive forms of interactivity. Therefore, in the information ecosystem, when affective and cognitive dimensions act, it allows for superior *CBE*, providing value for users. Therefore, brands also facilitate the need to satisfy specific motivations for belonging and social validation, offering consumers social benefit. In addition, the results explain how interactivity factors play a role in decision-making (Bilro and Loureiro 2020).

The results also indicated that the *CBE* variable was explained by cognitive processing, followed by affective and behavioral processing. Therefore, once the consumer is exposed to sensory stimuli combined with interactive social communication, the branded content of TikTok will require less cognitive load. They facilitate the activation of affective factors, which trigger pleasant sensations in the user, and facilitate the activation of the behavioral factor. Curiously, the authors did not identify any studies that analyzed how the *CBE* variable is formed and, in turn, what direct effect it has on behavioral measures. These results contribute to



Klein and Sharma's (2022) work by providing more extensive results on how each dimension affects purchase intention. Finally, our results support how consumer action and responses to engagement occur through new interactive media. These findings are congruent with behaviorism, as the results explain how a stimulus drives various forms of engagement and how it conditions consumer behavior. This form of conditioning is explained by the interactivity and particularities of TikTok's interactive environment.

Managerial implications

This study's result has several practical implications. First, it provides a practical understanding of how SNSs, such as TikTok, act on new generational groups. TikTok offers users space for expression to support their values and creativity (Xu et al. 2019; Zuo and Wang 2019). The results indicate that users use the platform for up to one hour daily, and TikTok significantly affects media engagement. This implies that TikTok has the power to engage its users exponentially more than other SNSs, enabling higher levels of attraction and, subsequently, higher levels of engagement, thus making it an ideal space for branding strategies. Its content model offers the possibility of sending more compelling and easily remembered advertising actions to users. Second, its content model and decentralized algorithm allow building genuine connections with Generation Z, resulting in high levels of CBR. These high levels of CBE significantly impact the purchase intent.

Generation Z is characterized by avoiding commercials and maintaining a direct, informal, and individual way of communication on SNS. TikTok effectively satisfies these characteristics; therefore, media engagement implies intrinsic value for its users. Thus, managers must create strategies to interact with the audience. Content strategies through #Challenges, promotions, tutorials, and interactive messages, focusing on authenticity, allow users to effectively connect with the brand. Once the brand connects with the user, it will allow its audience to search for more content, positively impacting CBE levels and, in turn, positively impacting purchase intent. The results indicate that high levels of CBE will mobilize the user to different forms of participation and even become involved in creating original branded content voluntarily. These findings explain that users take the brand as a form of expression of their identity. These results contribute to the work of Voorveld et al. (2018), who highlight that consumer engagement is composed of diverse experiences and is uniquely experienced according to each social platform. Therefore, the role of marketing strategy should focus on identifying and satisfying users' needs according to the platform's characteristics, providing novel, engaging, and attractive content to Generation Z.

Limitations and future research

One limitation is that this study only analyzed *engagement* from the consumer perspective and did not consider the business perspective. Indirect interaction variables, such as the benefit of consumer engagement through tangible and intangible factors, have been evaluated (Bilro and Loureiro 2020). On the other hand, this study also did not analyze other forms of engagement, such as engagement with online brand communities and engagement behaviors. Future studies could contemplate the different forms of engagement, thus allowing us to understand how they interact with consumer engagement on SNSs. Future studies could investigate engagement from the different perspectives of various generational groups. As the popularity of the TikTok platform has evolved into other demographic groups, it is interesting to understand whether engagement actions tend to differ.

Conclusion

In the end, the SNS framework has evolved dramatically, and there is a need to understand how these new interactive media, such as TikTok, substantially change the way marketing strategies are managed. The results of this study reflect a valuable scientific contribution by showing novel results on how social media continues to evolve, and how it impacts consumer engagement and behavioral measures.

Declarations

Conflict of interest The author confirms that all authors have participated in (a) conception and design, or analysis and interpretation of the data; (b) drafting the article or revising it critically for important intellectual content; and (c) approval of the final version. This manuscript has not been submitted to, nor is under review at, another journal or other publishing venue. The authors have no affiliation with any organization with a direct or indirect financial interest in the subject matter discussed in the manuscript.

Human and/or animals participants The authors declare that this research study complies with the standards of ethics in human subject's research. And the conduct of the study was approved by the IRB committee under the Universidad Ana G. Mendez with approved protocol number 1414048-1.

Informed consent Informed consent was not required for this study.

References

- Achterberg, W., A.M. Pot, A. Kerkstra, M. Ooms, M. Muller, and M. Ribbe. 2003. The effect of depression on social engagement in newly admitted Dutch nursing home residents. *The Gerontologist* 43(2): 213–218.



- Adcock, R. 2001. Measurement validity: A shared standard for qualitative and quantitative research. *American Political Science Review* 95(03): 529–546. <https://doi.org/10.1017/s0003055401003100>.
- Alalwan, A.A. 2018. Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management* 42(42): 65–77. <https://doi.org/10.1016/j.ijinfomgt.2018.06.001>.
- Algesheimer, R., U.M. Dholakia, and A. Herrmann. 2005. “The social influence of brand community: Evidence from European car clubs. *Journal of Marketing* 69(3): 19–34.
- Aluri, A., L. Slevitch, and R. Larzelere. 2015. The Influence of Embedded Social Media Channels on Travelers’ Gratifications, Satisfaction, and Purchase Intentions. *Cornell Hospitality Quarterly* 57(3): 250–267. <https://doi.org/10.1177/1938965515615685>.
- Andreassen, C.S., S. Pallesen, and M.D. Griffiths. 2017. The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors* 64(64): 287–293. <https://doi.org/10.1016/j.addbeh.2016.03.006>.
- Arghashi, V., and C. Arsun Yuksel. 2022. Customer brand engagement behaviors: The role of cognitive values, intrinsic and extrinsic motivations and self-brand connection. *Journal of Marketing Theory and Practice*. <https://doi.org/10.1080/10696679.2021.2018936>.
- Bailey, A.A., C.M. Bonifield, and J.D. Elhai. 2021. Modeling consumer engagement on social networking sites: Roles of attitudinal and motivational factors. *Journal of Retailing and Consumer Services*. <https://doi.org/10.1016/j.jretconser.2020.102348>.
- Barger, V., J.W. Peltier, and D.E. Schultz. 2016. Social media and consumer engagement: A review and research agenda. *Journal of Research in Interactive Marketing* 10(4): 268–287. <https://doi.org/10.1108/jrim-06-2016-0065>.
- Bazi, S., R. Filieri, and M. Gorton. 2020. Customers’ motivation to engage with luxury brands on social media. *Journal of Business Research* 112: 223–235. <https://doi.org/10.1016/j.jbusres.2020.02.032>.
- Bilro, R.G., and S.M.C. Loureiro. 2020. A consumer engagement systematic review: Synthesis and research agenda. *Spanish Journal of Marketing - ESIC* 24(3): 283–307. <https://doi.org/10.1108/sjme-01-2020-0021>.
- Boyd, D. 2010. Streams of Content, Limited Attention: The Flow of Information through Social Media. *EDUCAUSE Review* 45(5): 26–28.
- Brodie, R.J., A. Ilic, B. Juric, and L. Hollebeek. 2013. Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research* 66(1): 105–114. <https://doi.org/10.1016/j.jbusres.2011.07.029>.
- Bucknell Bossen, C., and R. Kottasz. 2020. Uses and gratifications sought by pre-adolescent and adolescent TikTok consumers. *Young Consumers*. <https://doi.org/10.1108/yc-07-2020-1186>.
- Calder, B. J., & Malthouse, E. C. (2018). Media engagement and advertising effectiveness. In K. Johnston & M. Taylor (Eds.), *In B. J. Calder (Ed.), Kellogg on advertising & media* (pp. 1–36). Wiley.
- Calder, B.J., and E.C. Malthouse. 2004. Qualitative media measures: Newspaper experiences. *International Journal on Media Management* 6(1–2): 123–130. <https://doi.org/10.1080/14241277.2004.9669388>.
- Castillo, A., J. Benitez, J. Llorens, X. Luo, and (Robert). 2021. Social media-driven customer engagement and movie performance: Theory and empirical evidence. *Decision Support Systems*. <https://doi.org/10.1016/j.dss.2021.113516>.
- Chahal, H., J. Wirtz, and A. Verma. 2020. Social media brand engagement: dimensions, drivers and consequences. *Journal of Consumer Marketing*. <https://doi.org/10.1108/jcm-11-2018-2937>.
- Chi, H.-H. 2011. Interactive digital advertising vs. virtual brand community. *Journal of Interactive Advertising* 12(1): 44–61. <https://doi.org/10.1080/15252019.2011.10722190>.
- Cho, M., M. Bonn, and S. Han. 2018. Generation Z’s sustainable volunteering: Motivations. *Attitudes and Job Performance. Sustainability* 10(5): 1400–1416. <https://doi.org/10.3390/su10051400>.
- Chua, T.H.H.H., and L. Chang. 2016. Follow me and like my beautiful selfies: Singapore teenage girls’ engagement in self-presentation and peer comparison on social media. *Computers in Human Behavior* 55(8): 190–197. <https://doi.org/10.1016/j.chb.2015.09.011>.
- Csikszentmihalyi, M. 1997. *Finding flow: The psychology of engagement with everyday life*. Basic Books.
- De Vries, N., and J. Carlsson. 2014. Examining the drivers and brand performance implications of customer engagement with brands in the social media environment. *Journal Brand Management* 21: 495–515. <https://doi.org/10.1057/bm.2014.18>.
- Di Gangi, P.M., and M.M. Wasko. 2016. Social media engagement theory: Exploring the influence of user engagement on social media usage. *Journal of Organizational and End User Computing* 28(2): 53–73. <https://doi.org/10.4018/joeuc.2016040104>.
- Dienlin, T. 2020. The impact of digital technology use on adolescent well-being. *Dialogues in Clinical Neuroscience* 22(2): 135–142.
- Djafarova, E., and T. Bowes. 2021. “Instagram made Me buy it”: Generation Z impulse purchases in fashion industry. *Journal of Retailing and Consumer Services*. <https://doi.org/10.1016/j.jretconser.2020.102345>.
- Erz, A., B. Marder, and E. Osadchaya. 2018. Hashtags: Motivational drivers, their use, and differences between influencers and followers. *Computers in Human Behavior* 89: 48–60. <https://doi.org/10.1016/j.chb.2018.07.030>.
- Evans, D., M. Jake, and B. Susan. 2010. *Social media marketing: The next generation of business engagement*. Wiley.
- Feng, Y.-L., C.-C. Chen, and S.-M. Wu. 2019. Evaluation of charm factors of short video user experience using FAHP—a case study of Tik Tok APP. *IOP Conference Series Materials Science and Engineering* 688(5): 055068. <https://doi.org/10.1088/1757-899x/688/5/055068>.
- Florenthal, B. 2019. Young consumers’ motivational drivers of brand engagement behavior on social media sites. *Journal of Research in Interactive Marketing* 13(3): 351–391. <https://doi.org/10.1108/jrim-05-2018-0064>.
- Fournier, S. 1998. Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research* 24(4): 343–353.
- France, C., B. Merrilees, and D. Miller. 2016. An integrated model of customer-brand engagement: Drivers and consequences. *Journal Brand Management* 23: 119–136. <https://doi.org/10.1057/bm.2016.4>.
- Gentina, E., and F. Rowe. 2020. Effects of materialism on problematic smartphone dependency among adolescents: The role of gender and gratifications. *International Journal of Information Management*. <https://doi.org/10.1016/j.ijinfomgt.2020.102134>.
- Gerson, J., A.C. Plagnol, and P.J. Corr. 2017. Passive and Active Facebook Use Measure (PAUM): Validation and relationship to the reinforcement sensitivity theory. *Personality and Individual Differences* 117: 81–90. <https://doi.org/10.1016/j.paid.2017.05.034>.
- Gibson, J.G. 1986. *The ecological approach to visual perception*. Lawrence Erlbaum.
- Gibson, J.J. 2015. *The ecological approach to visual perception*. Psychology Press.
- Goldfarb, A., R.C. McDevitt, S. Samila, and B.S. Silverman. 2015. The effect of social interaction on economic transactions: Evidence



- from changes in two retail formats. *Management Science* 61(12): 2963–2981. <https://doi.org/10.1287/mnsc.2014.2030>.
- Hair, J.F., M.C. Howard, and C. Nitzl. 2020. Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research* 109: 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>.
- Hair, J.F., T. Hult, C. Ringle, and M. Sarstedt. 2021. *A primer on partial least squares structural equation modeling (PLS-SEM)*, 3rd ed. New York.
- Hair, J.F., M. Sarstedt, C. Ringle, and S. Gudergan. 2018. *Advanced issues in partial least squares structural equation modeling*. Sage.
- Harmeling, C.M., J.W. Moffett, M.J. Arnold, and B.D. Carlson. 2016. Toward a theory of customer engagement marketing. *Journal of the Academy of Marketing Science* 45(3): 312–335. <https://doi.org/10.1007/s11747-016-0509-2>.
- Harrigan, P., T.M. Daly, K. Coussement, J.A. Lee, G.N. Soutar, and U. Evers. 2021. Identifying influencers on social media. *International Journal of Information Management*. <https://doi.org/10.1016/j.ijinfomgt.2020.102246>.
- Heckathorn, D. 1997. Respondent-driven sampling: A new approach to the study of hidden populations. *Social Problems* 44(2): 174–199. <https://doi.org/10.1525/sp.1997.44.2.03x0221m>.
- Henseler, J., C.M. Ringle, and M. Sarstedt. 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science* 43(1): 115–135. <https://doi.org/10.1007/s11747-014-0403-8>.
- Henseler, J., C.M. Ringle, and R.R. Sinkovics. 2009. The use of partial least squares path modeling in international marketing. *Advances in International Marketing* 20: 277–319. [https://doi.org/10.1108/s1474-7979\(2009\)0000020014](https://doi.org/10.1108/s1474-7979(2009)0000020014).
- Henzel, V., and A. Håkansson. 2021. Hooked on virtual social life. Problematic social media use and associations with mental distress and addictive disorders. *PLOS ONE* 16(4): e0248406. <https://doi.org/10.1371/journal.pone.0248406>.
- Hollebeek, L.D. 2011. Demystifying customer brand engagement: Exploring the loyalty nexus. *Journal of Marketing Management* 27(7–8): 785–807. <https://doi.org/10.1080/0267257x.2010.500132>.
- Hollebeek, L.D., and K. Macky. 2019. Digital content marketing's role in fostering consumer engagement, trust, and value: Framework, fundamental propositions, and implications. *Journal of Interactive Marketing* 45(1): 27–41. <https://doi.org/10.1016/j.intmar.2018.07.003>.
- Hollebeek, L.D., M.S. Glynn, and R.J. Brodie. 2014. Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing* 28(2): 149–165. <https://doi.org/10.1016/j.intmar.2013.12.002>.
- IDEPR (2021) *Censo PR*. Retrieved <https://censo.estadisticas.pr/EstimadosPoblacionales>
- Iqbal, M. (2021). *TikTok Revenue and Usage Statistics (2021)*. Business of Apps. <https://www.businessofapps.com/data/tik-tok-statistics/>
- Ismail, A.R., B. Nguyen, J. Chen, T.C. Melewar, and B. Mohamad. 2020. Brand engagement in self-concept (BESC), value consciousness and brand loyalty: A study of generation Z consumers in Malaysia. *Young Consumers*. <https://doi.org/10.1108/yc-07-2019-1017>.
- Jaakkola, E., and M. Alexander. 2014. The role of customer engagement behavior in value co-creation: A service system perspective. *Journal of Service Research* 17(3): 247–261.
- Jones, A.R., S.-E. Lee, and (Joy). 2021. Factors influencing engagement in fashion Brands' instagram posts. *Fashion Practice* 14(1): 1–25. <https://doi.org/10.1080/17569370.2021.1938820>.
- Kartajaya, H., I. Setiawan, and P. Kotler. 2021. *Marketing 5.0: Technology for humanity*. Wiley.
- Kearsley, G., and B. Shneiderman. 1998. Engagement theory: A framework for technology-based teaching and learning. *Educational Technology* 38(5): 20–23.
- Kettinger, W.J., and C.C. Lee. 1994. Perceived service quality and user satisfaction with the information services function. *Decision Sciences* 25(5–6): 737–766. <https://doi.org/10.1111/j.1540-5915.1994.tb01868.x>.
- Khan, I., L.D. Hollebeek, M. Fatma, J.U. Islam, and Z. Rahman. 2020. Brand engagement and experience in online services. *Journal of Services Marketing* 34(2): 163–175. <https://doi.org/10.1108/jsm-03-2019-0106>.
- Khan, M.L. 2017. Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior* 66: 236–247. <https://doi.org/10.1016/j.chb.2016.09.024>.
- Klein, A., and V.M. Sharma. 2022. Consumer decision-making styles, involvement, and the intention to participate in online group buying. *Journal of Retailing and Consumer Services* 64: 102808. <https://doi.org/10.1016/j.jretconser.2021.102808>.
- Kumar, V., L. Aksoy, B. Donkers, R. Venkatesan, T. Wiesel, and S. Tillmanns. 2010a. Undervalued or overvalued customers: Capturing total customer engagement value. *Journal of Service Research* 13(3): 297–310.
- Kumar, V., L. Aksoy, B. Donkers, R. Venkatesan, T. Wiesel, and S. Tillmanns. 2010. Undervalued or overvalued customers: Capturing total customer engagement value. *Journal of Service Research* 13(3): 297–310. <https://doi.org/10.1177/1094670510375602>.
- Kumar, V., I. Khan, M. Fatma, and A. Singh. 2022. Engaging luxury brand consumers on social media. *Journal of Consumer Marketing* 39(1): 121–132. <https://doi.org/10.1108/jcm-10-2020-4175>.
- Lee, C.-H., and J.J. Wu. 2017. Consumer online flow experience. *Industrial Management & Data Systems* 117(10): 2452–2467. <https://doi.org/10.1108/imds-11-2016-0500>.
- Leftheriotis, I., and M.N. Giannakos. 2014. Using social media for work: Losing your time or improving your work? *Computers in Human Behavior* 31: 134–142. <https://doi.org/10.1016/j.chb.2013.10.016>.
- Lontoh, C.N., F.A. Suyuthi, and J.N.I.C. Sagala. 2022. Engagement behavior generation Z on TikTok case study: Cosmetic brands. *Budapest International Research and Critics Institute (BIRCI-Journal) Humanities and Social Sciences* 5(2): 10092–10101.
- Magnani, R., K. Sabin, T. Sidel, and D. Heckathorn. 2005. Review of sampling hard-to-reach and hidden populations for HIV surveillance. *AIDS* 19: S67–S72.
- Malhotra, N.K. 2020. *Marketing research: An applied orientation*. England Pearson.
- Mangold, W.G., and D.J. Faulds. 2009. Social media: The new hybrid element of the promotion mix. *Business Horizons* 52(4): 357–365. <https://doi.org/10.1016/j.bushor.2009.03.002>.
- Marwick, A., and D. Boyd. 2011. I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience-Alice E. Marwick, Danah Boyd, 2011. *New Media & Society* 13(1): 4458.
- Medium (2020). *How TikTok Is Addictive*. Medium. <https://medium.com/dataseries/how-tiktok-is-addictive-1e53dec10867>
- Molina-Prados, A., F. Muñoz-Leiva, and M.B. Prados-Peña. 2021. The role of customer brand engagement in the use of Instagram as a “shop window” for fashion-industry social commerce. *Journal of Fashion Marketing and Management: An International Journal* 26(3): 495–515. <https://doi.org/10.1108/jfmm-12-2020-0275>.
- Msallati, A. 2021. Investigating the nexus between the types of advertising messages and customer engagement: Do customer



- involvement and generations matter? *Journal of Innovations in Digital Marketing* 2(1): 1–13.
- Naeem, M., and W. Ozuem. 2021. (2021) Understanding the social consumer fashion brand engagement journey: Insights about reputed fashion brands. *Journal Brand Management* 28: 510–525. <https://doi.org/10.1057/s41262-021-00239-5>.
- Oh, C., Y. Roumani, J.K. Nwankpa, and H.-F. Hu. 2017. Beyond likes and tweets: Consumer engagement behavior and movie box office in social media. *Information & Management* 54(1): 25–37. <https://doi.org/10.1016/j.im.2016.03.004>.
- Omar, B., and W. Dequan. 2020. Watch, share or create: The influence of personality traits and user motivation on TikTok mobile video usage. *International Journal of Interactive Mobile Technologies (IJIM)* 14(04): 121–137. <https://doi.org/10.3991/ijim.v14i04.12429>.
- Pagani, M., and A. Mirabello. 2011. The influence of personal and social-interactive engagement in social TV Web sites. *International Journal of Electronic Commerce* 16(2): 41–68. <https://doi.org/10.2753/jec1086-4415160203>.
- Paine, K. 2011. *Measure what matters: Online tools for understanding customers, social media, engagement, and key relationships*. Wiley.
- Palmatier, R.W., R.P. Dant, D. Grewal, and K.R. Evans. 2006. “Factors influencing the effectiveness of relationship marketing: A meta-analysis. *Journal of Marketing* 70(4): 136–153.
- Prahalad, C. K., & V. Ramaswamy. 2004. The future of competition: co-creating unique value with customers. In *Choice Reviews Online* (Vol. 41, Issue 11). Boston, MA: Harvard Business School Press. <https://doi.org/10.5860/choice.41-6635>
- Qiyang, Z., & Jung. 2019. Learning and Sharing Creative Skills with Short Videos: A Case Study of User Behavior in TikTok and Bilibili. *International Association of Societies of Design Research Conference 2019*, 2–9. <https://iasdr2019.org/uploads/files/Proceedings/le-f-1209-Zho-Q.pdf>. <https://iasdr2019.org/uploads/files/Proceedings/le-f-1209-Zho-Q.pdf>.
- Rangaswamy, A., N. Moch, C. Felten, G. van Bruggen, J.E. Wieringa, and J. Wirtz. 2020. The role of marketing in digital business platforms. *Journal of Interactive Marketing* 51: 72–90. <https://doi.org/10.1016/j.intmar.2020.04.006>.
- Razmus, W., M. Jaroszyńska, and M. Pałęga. 2017. Personal aspirations and brand engagement in self-concept. *Personality and Individual Differences* 105: 294–299. <https://doi.org/10.1016/j.paid.2016.10.018>.
- Ringle, Sarstedt, and Straub,. 2012. Editor’s comments: A critical look at the use of PLS-SEM in “MIS Quarterly.” *MIS Quarterly* 36(1): 3–15. <https://doi.org/10.2307/41410402>.
- Ruano, L.E., and J.A. Maca. 2017. Motivation in the use of virtual social networks. *CAIQ* 3: 1982–1991.
- Ruiz, J. 2021. Frequency of Engagement Rate per minute. In *Tik Tok for Business* (p. 1). Head of Marketing Science, TikTok. <https://www.tiktok.com/business/library/TikTokDrivesGreaterAudienceEngagement.pdf>
- Schivinski, B., G. Christodoulides, and D. Dabrowski. 2016. Measuring consumers’ engagement with brand-related social-media content. *Journal of Advertising Research* 56(1): 64–80. <https://doi.org/10.2501/jar-2016-004>.
- Sepp, M., V. Liljander, and J. Gummerus. 2011. Private bloggers’ motivations to produce content—a gratifications theory perspective. *Journal of Marketing Management* 27(13–14): 1479–1503. <https://doi.org/10.1080/0267257x.2011.624532>.
- Shane-Simpson, C., A. Manago, N. Gaggi, and K. Gillespie-Lynch. 2018. Why do college students prefer Facebook, Twitter, or Instagram? Site affordances, tensions between privacy and self-expression, and implications for social capital. *Computers in Human Behavior* 86: 276–288. <https://doi.org/10.1016/j.chb.2018.04.041>.
- Shao, G. 2009. Understanding the appeal of user-generated media: A uses and gratification perspective. *Internet Research* 19(1): 7–25. <https://doi.org/10.1108/10662240910927795>.
- Singh, A.P., and J. Dangmei. 2016. Understanding the generation Z: The future workforce. *South-Asian Journal of Multidisciplinary Studies* 3(3): 1–5.
- Song, S., and M. Yoo. 2016. The role of social media during the pre-purchasing stage. *Journal of Hospitality and Tourism Technology* 7(1): 84–99. <https://doi.org/10.1108/jhtt-11-2014-0067>.
- Southgate, D. 2017. The emergence of Generation Z and its impact in advertising: Long-term implications for media planning and creative development. *Journal of Advertising Research* 57(2): 227–235.
- Statista 2021. *Topic: TikTok marketing*. Statista. <https://www.statista.com/topics/8309/tiktok-marketing/#dossierKeyfigures>.
- Sundar, S.S. 2000. Multimedia effects on processing and perception of online news: A study of picture, audio, and video downloads. *Journalism & Mass Communication Quarterly* 77(3): 480–499. <https://doi.org/10.1177/107769900007700302>.
- Sundar, S.S., and A.M. Limperos. 2013. Uses and grats 2.0: New gratifications for new media. *Journal of Broadcasting & Electronic Media* 57(4): 504–525. <https://doi.org/10.1080/08838151.2013.845827>.
- Tang, D. 2019. The New Situation of Marketing in the Self-Media Era-Taking Tik Tok as an Example. *2nd International Workshop on Advances in Social Sciences*, 1557–1560. <https://doi.org/10.25236/iwass.2019.281>.
- Tik Tok for Business 2021. *TikTok For Business: marketing on TikTok*. [www.tiktok.com](http://www.tiktok.com/business/es). <https://www.tiktok.com/business/es>.
- Tik Tok for Business 2022. *Supercharge your TikTok strategy with an Always Engaged approach*. TikTok for Business. <https://www.tiktok.com/business/es/blog/supercharge-your-tiktok-strategy-with-an-always-engaged-approach>.
- Toni, M., & G. Mattia. 1043. Tik Tok hashtag challenge: a new digital strategy for Consumer Brand Engagement (CBE). *Proceedings of the European Marketing Academy*, 2–9. <http://proceedings.emac-online.org/pdfs/R2021-104352.pdf>. <http://proceedings.emac-online.org/pdfs/R2021-104352.pdf>.
- Turner, A. 2015. Generation Z: Technology and Social Interest. *The Journal of Individual Psychology* 71(2): 103–113. <https://doi.org/10.1353/jip.2015.0021>.
- Unnava, V., and A. Aravindakshan. 2021. How does consumer engagement evolve when brands post across multiple social media? *Journal of the Academy of Marketing Science* 49(5): 864–881. <https://doi.org/10.1007/s11747-021-00785-z>.
- van Doorn, J., K.N. Lemon, V. Mittal, S. Nass, D. Pick, P. Pirner, and P.C. Verhoef. 2010. Customer engagement behavior: Theoretical foundations and research directions. *Journal of Service Research* 13(3): 253–266. <https://doi.org/10.1177/1094670510375599>.
- Verduyn, P., N. Gugushvili, and E. Kross. 2021. Do social networking sites influence well-being? The extended active-passive model. *Current Directions in Psychological Science* 31(1): 62–68. <https://doi.org/10.1177/09637214211053637>.
- Verduyn, P., N. Gugushvili, K. Massar, K. Täht, and E. Kross. 2020. Social comparison on social networking sites. *Current Opinion in Psychology* 36: 32–37. <https://doi.org/10.1016/j.copsyc.2020.04.002>.
- Verduyn, P., O. Ybarra, M. Résibois, J. Jonides, and E. Kross. 2017. Do social network sites enhance or undermine subjective well-being? A critical review. *Social Issues and Policy Review* 11(1): 274–302. <https://doi.org/10.1111/sipr.12033>.
- Vivek, S.D., S.E. Beatty, V. Dalela, and R.M. Morgan. 2014. A generalized multidimensional scale for measuring customer engagement. *Journal of Marketing Theory and Practice* 22(4): 401–420. <https://doi.org/10.2753/mtp1069-6679220404>.



- Voorveld, H.A.M., G. van Noort, D.G. Muntinga, and F. Bronner. 2018. Engagement with social media and social media advertising: The differentiating role of platform type. *Journal of Advertising* 47(1): 38–54. <https://doi.org/10.1080/00913367.2017.1405754>.
- Wang, Y.-H., T.-J. Gu, and S.-Y. Wang. 2019. Causes and characteristics of short video platform internet community taking the TikTok short video application as an example. *IEEE Xplore*. <https://doi.org/10.1109/ICCE-TW46550.2019.8992021>.
- Whiting, A., and D. Williams. 2013. Why people use social media: A uses and gratifications approach. *Qualitative Market Research: An International Journal* 16(4): 362–369. <https://doi.org/10.1108/qmr-06-2013-0041>.
- Willis, M. 2007. *An emotionally intelligent user interface: modelling emotion for user engagement*. In Proceedings of the 19th Australasian Conference on Computer-Human Interaction: Entertaining User Interfaces (pp. 187–190).
- Xiao, Y., L., Wang, & P., Wang. 2019. Research on the influence of content features of short video marketing on consumer purchase intentions. *Proceedings of the 2019 4th International Conference on Modern Management, Education Technology and Social Science (MMETSS 2019)*, 351, 415–422. <https://doi.org/10.2991/mmets-19.2019.82>.
- Xu, L., X. Yan, and Z. Zhang. 2019. Research on the causes of the “Tik Tok” app becoming popular and the existing problems. *Journal of Advanced Management Science* 7(2): 59–63.
- Yang, H.C., and Y. Wang. 2015. Social sharing of online videos: Examining american consumers' video sharing attitudes, intent, and behavior. *Psychology & Marketing* 32(9): 907–919. <https://doi.org/10.1002/mar.20826>.
- Yang, S., Y. Zhao, and Ma, and Y. 2019. Analysis of the reasons and development of short video application-taking Tik Tok as an example. *Webofproceedings* 5: 340–343.
- Yue, Z., R. Zhang, and J. Xiao. 2021. Passive social media use and psychological well-being during the COVID-19 pandemic: The role of social comparison and emotion regulation. *Computers in Human Behavior* 127: 107050. <https://doi.org/10.1016/j.chb.2021.107050>.
- Zuo, H., and T. Wang. 2019. Analysis of Tik Tok user behavior from the perspective of popular culture. *Frontiers in Art Research* 1(3): 1–5.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.

José A Flecha is an assistant professor in Marketing and Management at the School of Business and Entrepreneurship at Universidad Ana G. Méndez (Puerto Rico) (AACSB). Him research focuses on Political Marketing, Consumer Psychology, and Interactive Marketing. Him work has been published in *Media International Australia*, *Journal of Business Research*, *Journal of Knowledge Management*, *Global Business Review*, *Journal of Small Business Strategic*, *European Business Review*, *Management Science Letter*, *Estudios Gerenciales*, *ESIC Market Economics*, *Multidisciplinary Business Review*, *Communication and Society*, *Cuadernos de Administración*, *Journal of Public Affairs*, and some other.

Maria Santos Corrada is an assistant professor in Marketing at the School of Graduate Business at Universidad de Puerto Rico en Rio Piedras(AACSB). Her research focuses on Environmental issues in business, social media and Consumer Behavior. Her work has been published in *Journal of Business Research*, *Journal of Knowledge Management*, *Global Business Review*, *Journal of Small Business Strategic*, *Media International Australia* *European Business Review*, *Estudios Gerenciales*, *ESIC Market Economics*, *Journal of Public Affairs* some others.

Evelyn Lopez is an assistant professor in Entrepreneurship and Management at the School of Business and Entrepreneurship at Universidad Ana G. Méndez (Puerto Rico). Her research focuses on Entrepreneurship, Innovation, Service Management, and Marketing. Her work has been published in *Journal of Business Research*, *European Business Review*, *Journal of Knowledge Management*, *Global Business*, *Estudios Gerenciales*, *ESIC Market Economics*, *Estudios Gerenciales*, and *Journal of Sociology and Social Policy*.

Virgin Dones is an associate professor in Marketing and International Business at Department of Business, Truism and Entrepreneurship at Universidad Ana G. Méndez (Puerto Rico). Him research focuses on Gender Study, Consumer Behavior, and Digital Marketing. Her work has been published in *Journal of Business Research*, *Global Business Review*, *Estudios Gerenciales*, *ESIC Market Economics*, *Multidisciplinary Business Review*, *Communication and Society*, and *Cuadernos de Administración*.

Vivian Filiberty Lugo is current Doctoral student of Management of Universidad Ana G Mendez (AABSB). She is professor in Hospitality Management and Marketing in Universidad Ana G Mendez Carolina Campus.

