

Telepresence, social presence and involvement in consumer's intention to buy apparels through an interplay of consumer brand engagement

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Abstract

Purpose – *The aim of this paper is to explore the effect of telepresence, social presence and consumer involvement on intention to purchase, with an intervening impact of three dimensions of consumer brand engagement (cognitive processing, affection processing and activation).*

Design/methodology/approach – *The study followed a surveying technique and an adopted questionnaire was used to collect data from 426 shoppers of apparels. The model was tested using Smart PLS and it was found that there is a positive relationship between telepresence, social presence and consumer brand involvement with consumer brand engagement, which also mediates their relationship with intention to purchase.*

Findings – *This study offers analytical evidence for telepresence, social presence and involvement of customers and advances the literature of brand engagement. Marketers can benefit from this study and design their future campaigns to enhance the involvement of customers by utilizing the outcomes of this study.*

Originality/value – *This study offers analytical evidence for telepresence, social presence and involvement of customers and advances the literature of brand engagement. Marketers can benefit from this study and design their future campaigns to enhance the involvement of customers by utilizing the outcomes of this study.*

Keywords *Telepresence, Social presence, Involvement, Brand engagement*

Paper type *Research paper*

1. Introduction

This work focuses on telepresence, social presence and the effect of consumer involvement on consumers who choose to buy branded products linked with the apparel industry. This also includes mediating variables, i.e. (CBE) consumer brand engagement dimensions.

These relationships have previously been studied in various articles, but knowledge must be improved (Algharabat, 2018; Ye *et al.*, 2020; Ying *et al.*, 2022). An earlier article discusses the effect of telepresence and other independent variables on CBE, but more work on intention to purchase it and align it with other variables is required (Aljuhmani *et al.*, 2022).

Research has been done on ties between CBEs and the intent to buy. Still, it has yet to be studied on customer engagement's effect on the intention to buy in this context, i.e. the mediating role of CBE with telepresence and social presence (Risitano *et al.*, 2017). The study did not speak much about the interaction between telepresence, virtual participation and customer interest in purchasing consumer products with the mediating influence of consumer company involvement. This research uses an online survey to learn more about the significance of telepresence, social interaction and business impact on consumers'

Received 2 October 2023
Revised 17 March 2024
Accepted 3 June 2024

intent to purchase. Telepresence is a device's predicted user experience level (Lim and Ayyagari, 2018). It appears before us when a product is on the web for sale, but in reality, it is only the telepresence of the product. To develop our awareness, we must discuss this sense of study. The problems of customer brand participation were always related to researchers' and academics' attention and consideration in the market (Hong et al., 2023). Indeed, devotion to customer goods is crucial in literature and tells us how to purchase the consumer (Gupta et al., 2020). The opportunity to build this mentality of the customers in interaction or via social media or some other type of platform can be referred to as a consumer brand contribution (Van der Westhuizen, 2018). The preceding work (Brodie et al., 2011) has also provided the basis for creating and assessing the CBE. Current studies have yet to expound on the influence of customer brand engagement through social networks, meaning that more analysis is needed.

Current research will enhance our knowledge of telepresence, social presence and consumer brand engagement with dimensions that include cognitive processing, affection and activation to see consumer purchase intention when using any brand website. Previous research focused on telepresence, social presence and consumer involvement with CBE (Algharabat, 2018). This paper's literature on these relationships and variables is taken from previous research. Still, they were not examined in detail in a specific context, particularly when it comes to the textile industry, so we need more development in our knowledge of this system; so when the mediation takes place in terms of CBE, we need to stress the significance of this variable as a mediating function. In addition, telepresence, web interaction and customer engagement are also being studied from the point of view of online networks, but not by CBE mediation. Previously, it has shown a positive relationship between telepresence, social presence, consumer involvement and consumer brand involvement (CBE). Still, we need to see its impact on consumers' intention to purchase branded products related to the apparel or textile industry (Yeboah et al., 2023).

2. Literature review and hypothesis development

Its focus defines telepresence as the psychological state of "being there" in an artificial atmosphere or a reality created by computation. Rational and intellectual excitement, mechanism and commitment are considered (Mollen and Wilson, 2010). The condition in which people are so interested that nothing appears to happen. This is intellectualized in navigation as a reasonable state that has to do with a high degree of capacity and control, increasing communications and telepresence at this testing stage (Novak et al., 2016). In addition, an overview of the relevance of the impact of online contact highlights the importance of the causal relationship between movement, customer behavior and the brand and buying intent.

The telepresence principle, which reflects the sense of presence in a remote environment, has developed. This indicates that telepresence is a faith regulated in the context that describes it as the capacity of users to psychologically view themselves in a particular area or circumstance when interacting with the brands on an online platform (Algharabat, 2018). Exploratory findings underline that participants exhibit realistic shopper behaviors in immersive virtual simulated stories (Schnack et al., 2020). The idea of consumer service interaction has been explored and articulated extensively in marketing strategy from diverse theoretical points of view, which can contribute to psychology and organization (Hollebeek et al., 2014). Nevertheless, analysis and work are still critical regarding the telepresence engagement of consumer brands.

Customer presence is a constructive trend that can boost consumer actions against customers (Alalwan et al., 2017). According to the telepresence principle, the operational definitions of the research study can be demonstrated by Table 1 below, which illustrates the variables and their operational meaning in the context of the analysis.

Table 1 Operational definitions of the study

<i>Variable</i>	<i>Operational definition</i>
Telepresence	The magnitude that customers feel physically present when shopping apparel in online shops
Involvement	The cognitive engagement of customers in the shopping procedure
Intention to buy apparels	The likelihood for customers to buy apparel through online shops
Social presence	The apparent association and collaboration between customers using online shops
Consumer brand engagement	The collaboration between consumers and the brand relating to the purchase of apparel products in online shops

Source: Created by author

In today's research, telepresence is the assumed usage of numerous advertised products produced on Facebook, Instagram or other social networking sites to allow customers to think about their company as being physically in front (Barta *et al.*, 2023). Nevertheless, telepresence depends entirely on the medium's potential to improve or increase brands' efficiency. It allows customers to see the products like they are physically, but they see them on online platforms (Roberts and David, 2023). From the perspective of the engagement of the social media consumers who interact with the brands online, the recently established "psychological condition of being in a particular technologically connected environment, enhanced by focused focus" therefore separates telepresence from the strength, involvement, physiological and behavioral excitement that consumers have in a regulated atmosphere and find themselves to be subjective in such a setting or scenario between brand and consumers (Mollen and Wilson, 2010). Interactivity is characterized as two-way contact, which is regulated in which all parties react to each other, i.e. products and customers, in this scenario (Mollen and Wilson, 2010). Saying that telepresence has a strong and important effect on customer brand engagement means that there is a meaningful influence on consumer brand engagement in online network contact. Previously, the effect of telepresence on interactivity, blogs, vividness and behavior was addressed (Coyle and Thorson, 2001). A degree of customer interaction with brands related to customers' emotions, affinity and behavior when engaging with products on an online channel, such as social networking networks, Facebook, Instagram and many others, is identified as consumer brand involvement (Hollebeek *et al.*, 2014). At the same time, the empirical body of research stresses the relevance of the flow to the social connection and the development of a causal relationship between the flow and the actions of the user on the platform and the desire to order and buy (Novak *et al.*, 2016). Several other studies, which have already been discussed, take the statement, in addition to presumed engagement through social networking networks and telepresence, that clearly distinguish the intermediate element between the end consumer of the product or service of the brand that is in the heuristics of the internet, if such a psychological state is viewed as flow or telepresence, and consumer perceptions and actions (Shih, 1998). However, more work needs to be carried out in the area of customer brand engagement and to relate it directly to telepresence as this research is focused on the apparel industry and consumers who buy or purchase branded clothes and interact on social media platforms such as Facebook, Instagram and many other social sites:

- H1. Telepresence has a positive impact on cognitive processing in CBE.
- H2. Telepresence has a positive impact on affection processing in CBE.
- H3. Telepresence has a positive impact on activation in CBE.

3. Social presence and consumer brand engagement

Social presence is the degree of feeling, awareness and reaction linked by computer-mediated communication (CMC) (Lowenthal, 2011). Its relative importance to every other person during communication and the consequent relative importance of an intimate interaction (Kreijns *et al.*, 2004). Connectivity patterns improve interpersonal and nonverbal contact with others (Rourke and Anderson, 2007). This represents the sensitivity of the customer and personalizes the online portal, which will eliminate the expectation of collaboration between the service provider, the user and the seller. At the same time, telepresence determines the level of participation of users in the online world, which can affect customer relationships (Wells *et al.*, 2008). Telepresence is the technical aspect of presence that measures the amount of retail interaction a consumer participates in as though they would physically touch the product. In the cyber world, it is also possible to increase emotional warmth and empathy through the capacity of organizations through interactive communities, community forums and talks to genuinely connect with other people or through the creative improvement of interactions with others through an online network. Gefen and Straub (2004) found that social interaction affects internet buyers' trust and their respective plans to purchase from one or more of their office pages. Scholars have explored their ability to incorporate emotional comfort in online applications, but typically, the impact of all such applications on subjective social presentation has yet to be so studied (Hassanein and Head, 2005).

Social presence theory was derived by Short Williams back in 1976, and it refers to or states "the degree of the role of these persons in the experience and the subsequent meaning of the social experiences" (Team, 2014). As many researchers have agreed earlier, the concept of social presence needs to be clarified. Researchers, however, keep redefining it. Moreover, the different researchers extend the concept of social presence and state about it. For example, Gunawardena (1995) has described social presence as the degree to which people at CMC are viewed as "actual." The virtual experience of Picciano (2002) is the understanding of the participants where they know and are part of an online course. Specifically, students examined and questioned their concept of social presence to recognize identifiable actions that students use to describe themselves as "true" individuals. Students assessed and questioned their viewpoints and social interaction on CMC to recognize the visible actions that students use to portray themselves as "real" individuals.

Generally, three stages have been recognized, and 12 aspects of social involvement have been established through previous research, additional literature and online transcript knowledge (Rourke and Anderson, 2007). Explicitly, three modes and 12 effects of social involvement have been established through previous studies, other field literature and academic information (Lowenthal, 2011). Anyone who explores social presence describes it often in a particular way; it makes it very challenging for researchers and physicians to make clear decisions about the essence of social presence. Despite that, in 2011, the definition of social identity was updated (Lowenthal, 2011). This research or theory states why it classifies communication media as having the capacity to convey socio-emotional signals so that the other person is perceived as "physically" present in an online interaction between brand and consumer.

Social presence further explains when any user or audience on Facebook interaction has been conceived as a conduit or channel by which brands encourage final customers to communicate directly with them in a way that is psychologically present here. Consequently, as long as the platform has an adequate degree of social contact, it can translate information related to facial expressions, appearance, apparel and non-verbal signals (Algharabat, 2018).

It claims that social interaction is related to customers' understanding of interpretation and identification (Yoo and Alavi, 2001). However, other research suggests that social contact is a neural process that depends on resources. The source or medium is perceived as warm

because it conveys a sense of personal connection, sociability and transparency (Kreijns *et al.*, 2004). The study notes it maximized the popularity of e-commerce through virtual displays, which comes under the social presence of the products on an online platform (Rourke and Anderson, 2007). The function of social presence will strengthen the positive relationship between social presence and engagement, customer connection with brands and touch. Consumers are also more likely to have positive neural, emotional and behavioral reactions as they encounter appropriate social involvement (Hassanein and Head, 2005). In the context of e-services, Gefen and Straub (2004) study the impact of social presence on the customer's purchase intentions of the consumers or audience is considered. They also investigated the impact of social presence on confidence in their work and concluded that utility systems are precedents for purchasing intentions. Social presence represents customer interest and is geared toward abstract rather than practical shopping objectives. The online platform used for shopping and social media will facilitate a positive purchasing experience rather than an unpleasant one (Hassanein and Head, 2005). However, we will address the social presence of consumer products concerning the online media used for interaction between products portrayed on Facebook, Instagram and several other sites and end customers or buyers engaging with them through the online channel:

H3. Social presence has a positive impact on activation in CBE.

H4. Social presence has a positive impact on cognitive processing in CBE.

H5. Social presence has a positive impact on affection processing in CBE.

4. Consumer brand involvement and consumer brand engagement

Consumer brand involvement implies engagement as either an inward moment of passion. It can reflect the customer's difficulty in the buying process to achieve a value of relative significance or total dedication (Algharabat, 2018). The degree of importance and the person's understanding of the element/choice concerning the customer's basic values, expectations or perceptions (Kwon and Mattila, 2015). Furthermore, the authors argue that, in this case, participation includes a site-specified name. The writers show that involvement is more than communication, as it applies only to the company's contact, as often defined by blogging (Mollen and Wilson, 2010). Participation often requires perceptual, emotional and interpersonal satisfaction, whereas commitment is usually associated with practical importance. The agency or judgment of a particular consumer will be based on the fundamental values, intentions or principles of someone (Kwon and Mattila, 2015). Consumer brand engagement is the psychological context-dependent customer frame of mind identified by a suitable level of cognitive, emotional or compartmental involvement in brand interactions (Hollebeek, 2011a, 2011b).

Brand engagement refers to consumers' willingness to use essential products to indicate how we describe ourselves (Hirschman and Holbrook, 2016). Current research has focused mainly on the CBE idea. The definition of engagement is usually increasing. In management literature, CBE became a significant concept. Company relationships depend on business arrangements (Vivek *et al.*, 2012). CBE is intended to encourage social benefits, including commitment, positive word of mouth and happiness in customer cooperation (Leckie *et al.*, 2016).

In 1985, a strong and important association was noted between customer brand interest and consumer brand participation (Zaichkowsky, 1985). Furthermore, many researchers describe customer brand engagement as a continuum of psychological training that typically influences the transfer of cognitive resources to the product, decision or usage actions (Thomson *et al.*, 2005). Recently (Bowden, 2009), one of the research informs us about consumer brand engagement as an inner realm of excitement that can be used to convey a customer's continuing interest regarding a good or service that is viewed as important general engagement to the purchase phase, in other terms, the interest of the

customer on his internal hand, which is connected to the commodity provided for sale by a retailer known as market company participation.

There is a strong connection between customer brand involvement and consumer brand interaction (Vivek *et al.*, 2012). Another study on the relationship of engagement with the client in the company's online contact indicates a good connection with the brand and its participation (including the three dimensions of CBE, i.e. cognitive thinking, intimacy and activation) (Aksoy *et al.*, 2013). Within organizational behavior, engagement is characterized as "work activities to promote and improve labor relations," expressed physically, cognitively and emotionally. Research has tried to differentiate between shallow gratification and broader, more positive, emotional responses to consumption to overcome the shortcomings of a solely logical approach to assessing customer behavior (Bowden, 2009). Acknowledges that involvement is a crucial precedent of the CBE. The definition of mobile phones means attendance has a significant effect on customer brand engagement (CBE) aspects, including cognitive development, intimacy and activation (Leckie *et al.*, 2016). It benefits the CBE facets of personal involvement (cognitive growth, affective and activation). But in the sense of social networking networks, we need to do further analysis to see whether their partnership is important and what impact it has had on the apparel industry:

H7. CBI has a positive impact on affection processing in CBE.

H8. CBI has a positive impact on activation in CBE.

H9. CBI has a positive impact on cognitive processing in CBE.

5. Consumer brand engagement and intention to purchase

Intention to buy is the potential of an internet channel to enhance a customer's or audience's personal identity may also be influenced by the technical existence of a product that could involve a graphical display and representation of the company product in web platforms as well as by the psychological attractiveness that may include the consistency of the visuals on our pages (Kim *et al.*, 2011). To establish intimacy and to communicate individuality to all others, he or she communicates himself or herself. Persons use occipital objects (particularly physical property) as well as other ways of displaying their pictures (e.g. corps execution and aural media).

Consumer brand interaction can be defined as a "Process of customer mind consciousness toward a company." Consumer brand engagement may cause a willingness to spend money without any reason or purpose, even though brand experience has to do with the business context as well as the intended motivation for buyers to purchase. And this view sees shoppers as rational and emotional users who are cognitively and emotionally affected by their purchasing interactions. Market brand presence significantly affects customers' decisions to purchase a commodity. The new system of consumer brand engagement remains in its early stages of growth.

Some academics have given theoretical guidance on the potential experience and the effects of consumer-brand interaction (Dwivedi, 2015). Although this term (customer brand engagement) is not common in recent studies, it is a major element in the overall production process and a brand interest historical context (Hollebeek *et al.*, 2014). When evaluating CBE studies, the findings of recent work have mainly concentrated on the cognitive dimension of the CBE framework connecting an individual to a brand (Spratt *et al.*, 2009).

Focused on this dynamic view, recent literature illustrates different but interlinked contact roles and experiences (Hollebeek, 2011a, 2011b). Consumer engagement can be achieved in different ways; however, the empirical research confirms that Augmenter Reality (AR) use in mobile applications leads to impulsive purchase intentions among millennial women (Trivedi *et al.*, 2022). While involvement theory has been widely regarded in academic fields, today, this is generally demonstrated mainly in marketing literature. The engagement

principle was considered an appealing dimension in the topic, which could offer an improved opportunity to clarify the effects of consumer loyalty; CBE was conceived as comprising of three essential components:

1. Absorption;
2. Excitement; and,
3. Last but not least, activation.

Interested consumers play a significant role in creating and co-production experiences and desires (Hollebeek, 2011a, 2011b). The same investigator has recently validated the concept with (Hollebeek *et al.*, 2014) quantitative research in social networking. However, in turn, the idea of consumer-brand interaction has to be matched with consumers' purchase desire to see how much in-depth connection they have and whether a meaningful relationship occurs:

H10. Cognitive processing in CBE has a positive impact on the intention to purchase.

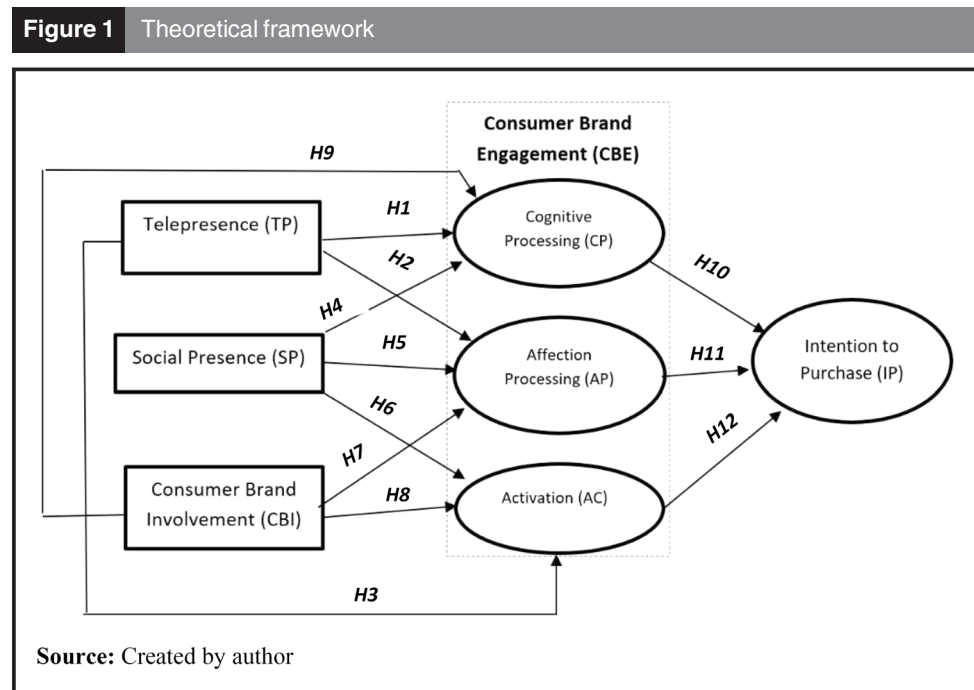
H11. Affection processing in CBE has a positive impact on the intention to purchase.

H12. Activation has a positive impact on the intention to purchase.

The association among the variables hypothesized is depicted in Figure 1.

5.1 Theoretical implications of the study

The theoretical framework in Figure 1 above shows that the research study comprises numerous hypothetical insinuations. First, analyzing consumer behavior based on telepresence and social presence provides essential information for advancing marketing and communication models (Virginie Lavoye *et al.*, 2023). According to the theoretical framework, telepresence and social presence shape the experience and collaboration of possible apparel customers by increasing their cognitive and affection processing and enhancing their intention to buy apparel products (Vazquez *et al.*, 2023). Adding the nuanced theoretical model of consumer brand engagement promotes users' likelihood to buy apparel



products because they can engage effectively with the brand on digital platforms such as Facebook and Instagram (Woo *et al.*, 2024). For instance, Instagram promotes customer engagement with apparel brands and shopping platforms by enabling the brands to showcase their products using images and videos of fashion models, hence providing consumers with actual details of the merchandise, such as color, fit and prices (Virginie Lavoye *et al.*, 2023). The actual engagement of the consumers, the apparel brands and the merchandise influence individuals' telepresence, social presence and participation, hence promoting their likelihood to buy the products (Woo *et al.*, 2024). The use of Instagram social platforms in promoting the apparel industry interprets the interplay between telepresence, customer involvement and social presence by influencing consumer behavior using videos, interactive posts and images designed to improve customer experience about apparel products and brands.

6. Methodology

Current research is based on positivism and is quantitative in nature, using a deductive approach. Data collection linked with the sample size and statistical methods enhances our knowledge regarding the validity and reliability used in the research. In this study, an aggregate of 500 prospective respondents were originally contacted through suitable sampling procedures. However, of the contacted respondents, only 426 people contributed to the study, a response rate of around 85.2%. The study's use of convenience sampling procedures promoted the ease and simplicity of collecting data required for the research hence promoting the final findings of the study (Hu and Qin, 2018). The research used a Likert scale of 1 to 5, with the options of Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree. The scale of this research is being adopted from previous articles. Telepresence, Social presence and Consumer involvement scale was adopted from Algharabat *et al.* (2018). The intention to purchase scale was adopted from Bianchi and Andrews (2018). The consumer brand engagement antecedents scale is adopted from Gupta *et al.* (2020).

7. Descriptive statistics

Descriptive statistics are being used to educate us on the essence of the data being gathered. There are 63.9% of male and 36.1% of female respondents. When it comes to age, 2% were below 18 years, 19.3% had 18 years to 23 years of age, 55.4% of respondents had age 24–29, 13.9% of respondents had 30–34 years of age, 4% had 35–39 years of age and lastly above 40 years of respondent are 5.4% in this research. Regarding marital status, 70.2% of the respondents are single, and 29.8% are married. Furthermore, 10% of the respondents had intermediate qualifications in terms of education, 55.96% of the respondents had a Bachelors's degree, 27.9% of the respondents had done a Master's degree or equivalent, remaining 6.5% of the respondents had done a PhD or above. The last question was, do they ever like a Facebook page of their favorite brand? The respondent's answer is interesting as follows: 70.5% said yes, 14% straight forward said NO, remaining 15.5% of the respondents said Maybe they have liked a Facebook page or not. The descriptive statistics are provided in Table 2.

8. Measurement model analysis

Measurement model analysis was done to validate the model. Reliability analysis was done to measure the internal consistency of data and validity was done to check the measurement accuracy. Cronbach's alpha and composite reliability analysis was done to measure the reliability. Whereas validity was established by measuring the discriminant validity of the items based on HTMT ratios and convergent validity through average variance extracted (Henseler *et al.*, 2015).

Table 2 Descriptive statistics

<i>Demographics</i>	<i>%</i>
<i>Gender</i>	
Male	63.9
Female	36.1
<i>Age</i>	
18 or below	2.0
18 to 23	19.3
24 to 29	55.4
30 to 34	13.9
35 to 39	4.0
40 or above	5.4
<i>Marital status</i>	
Single	70.2
Married	29.8
<i>Highest level of education</i>	
Intermediate	10.0
Bachelors	55.96
Master	27.9
PhD or above	6.5
<i>Have you ever liked your favorite brand's Facebook page?</i>	
Yes	70.5
No	14.0
May be	15.5

Source: Created by author

9. Construct reliability and validity

Cronbach's alpha is acceptable when the value of the variable outcome is more than 0.7.

Cronbach's alpha measures the internal consistency of items, and we see how they are linked closely. The above result shows that the values of all items are more than 0.7. Composite reliability is used to measure how much data is reliable. The values should be more than 0.6; if they are below 0.6, it will show that the data is less reliable. The above results show that all the items' data are more reliable or proved to be composite reliable as they are above 0.8. Average variance extracted (AVE) is the amount of variance due to the mistake in estimation; the average variance obtained is a measure of the amount of variance. It is used to measure the error in data and see whether the data sounds okay or not, we measure all the data based on the 0.5 benchmark, and the values should be more than 0.5. Table 3 shows that all items result is more than 0.5. Moreover, it depicts values of construct reliability and validity. Further, analysis shows that the data is proved to be discriminant valid as it is below 0.8; for discriminant validity, the value should be less than 0.85, as suggested by Franke and Sarstedt (2019).

Table 3 Composite reliability and validity

<i>Constructs</i>	<i>Cronbach's Alpha</i>	<i>CR</i>	<i>AVE</i>	<i>AC</i>	<i>AP</i>	<i>CI</i>	<i>CP</i>	<i>IP</i>	<i>TP</i>	<i>SP</i>
AC	0.754	0.859	0.671	0.819						
AP	0.872	0.922	0.796	0.514	0.892					
CI	0.798	0.88	0.711	0.513	0.575	0.843				
CP	0.797	0.881	0.713	0.692	0.614	0.579	0.844			
IP	0.876	0.924	0.801	0.571	0.588	0.565	0.615	0.895		
TP	0.879	0.917	0.734	0.551	0.594	0.742	0.642	0.539	0.857	
SP	0.85	0.899	0.69	0.633	0.601	0.57	0.624	0.607	0.624	0.83

Source: Created by author

Variance inflated factor (VIF) values should not exceed five; if it exceeds, then it refers to multicollinearity (Kyriazos and Poga, 2023). VIF result shows that results are less than recommended threshold value which means there is no issue in the data. Table 4 depicts the VIF values of the data, and Figure 2 is the graphical representation of the measurement model.

10. Structural model assessment

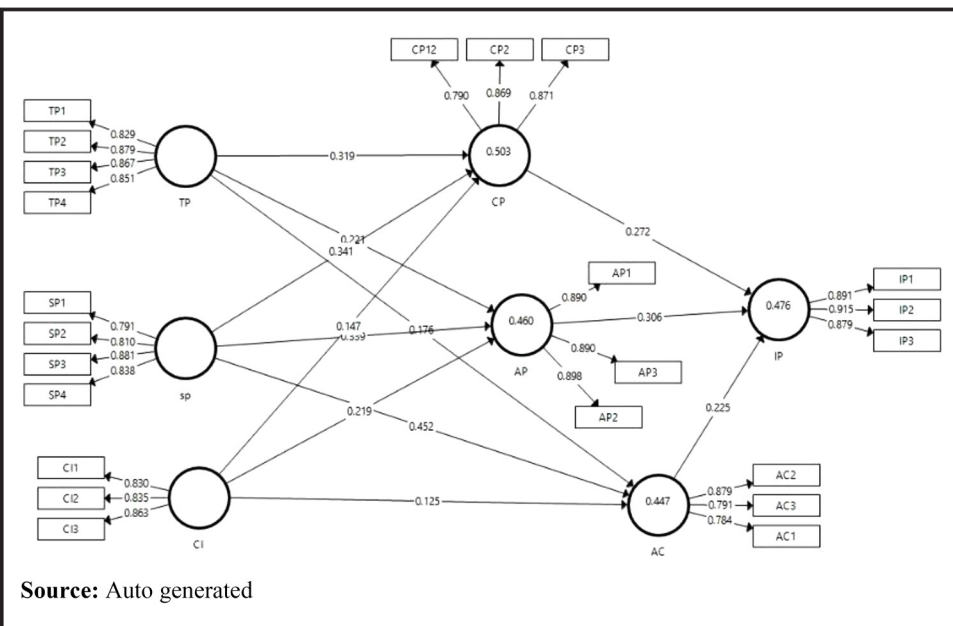
The structural model's exogenous variables describe the amount of variance of cognitive process ($R^2 = 0.503$), Affection process ($R^2 = 0.460$), Activation ($R^2 = 0.447$) and intention to purchase ($R^2 = 0.476$), which is a strong amount of variance. Path coefficient is done by bootstrapping test. Below table shows that there is a positive relationship between telepresence and cognitive process, affection process and activation accordingly ($\beta = 0.319, t = 5.005; \beta = 0.221, t = 3.45; \beta = 0.176, t = 2.941$). There is a positive relationship between social presence and cognitive process, affection process and activation accordingly ($\beta = 0.341, t = 5.737; \beta = 0.339, t = 5.274; \beta = 0.452, t = 8.981$). The above results also show a positive relationship between consumer involvement and cognitive process, affection and activation accordingly ($\beta = 0.147, t = 2.51; \beta = 0.219, t = 3.512; \beta = 0.125, t = 2.178$). Furthermore, a positive relationship exists between consumer involvement and intention to purchase ($\beta = 0.272, t = 4.147$). The above results show a positive relationship between the affection process and intention to purchase ($\beta = 0.306, t = 5.493$). Finally, the above analysis shows a positive relationship between activation and intention to

Table 4 VIF values

Constructs	AC	AP	CP
IP	1.966	1.645	2.32
CI	2.322	2.322	2.322
TP	2.569	2.569	2.569
SP	1.709	1.709	1.709

Source: Created by author

Figure 2 Measurement model



Source: Auto generated

purchase ($\beta = 0.225$, $t = 3.869$). Table 5 presents the hypotheses testing results, and Figure 3 shows the structural model assessment.

11. Practical implications of the study

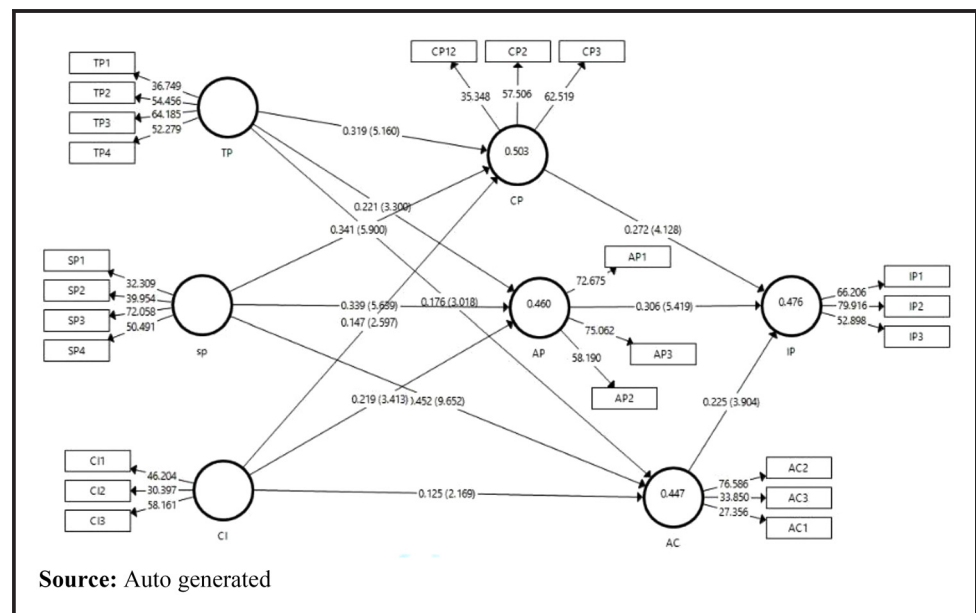
The correlation between telepresence, consumer involvement and social presence has useful practical implications in marketing. The confluence between these concepts provides actionable insights for marketers and the apparel industry associated with essential metrics for promoting the sector (Guo *et al.*, 2023). Based on the descriptive statistics, the youth aged 18–23 and 24–29 represent the highest percentage of consumers utilizing social media platforms such as Facebook and Instagram (Guo *et al.*, 2023). They are the target group for apparel products due to their clothing needs and accessibility to disposable funds. As a result, marketers in the apparel industry can utilize the study to learn specific strategies for influencing the youth to consume their

Table 5 Hypotheses testing results

S. no.	Hypotheses	Beta	t-statistics	p-values	f-square	CILL	CIUL	Result
1	TP → CP	0.319	5.005	0.000	0.219	0.105	0.31	Significant
2	TP → AP	0.221	3.45	0.000	0.221	0.115	0.323	Significant
3	TP → AC	0.176	2.941	0.002	0.225	0.13	0.322	Significant
4	SP → CP	0.341	5.737	0.000	0.125	0.032	0.218	Significant
5	SP → AP	0.339	5.274	0.000	0.147	0.045	0.242	Significant
6	SP → AC	0.452	8.981	0.000	0.176	0.083	0.278	Significant
7	CBI → AP	0.219	3.512	0.000	0.319	0.222	0.437	Significant
8	CBI → AC	0.125	2.178	0.015	0.341	0.236	0.433	Significant
9	CBI → CP	0.147	2.51	0.006	0.306	0.214	0.4	Significant
10	CP → IP	0.272	4.147	0.000	0.272	0.167	0.379	Significant
11	AP → IP	0.306	5.493	0.000	0.339	0.239	0.447	Significant
12	AC → IP	0.225	3.869	0.000	0.452	0.369	0.535	Significant

Source: Created by author

Figure 3 Structural model



Source: Auto generated

products, such as creating youth-focused immersive content that elaborates on the details of apparel products (Khan *et al.*, 2016).

Additionally, they can use the study to understand youth's favorite social media platforms, such as Instagram, and their competitive features compared to other social platforms, such as personalized feeds and shopping tags. The research study also provides insights into the economic and commercial input, such as the ability to use the concepts of telepresence, social presence and consumer involvement in defining effective marketing strategies for diverse sectors. Based on the behavior and demographics of the target group illustrated in this study, marketing agencies can develop and educate their employees on strategies to improve the efficiency of their advertising and user experience (Cai and Choi, 2023). In this case, the study's practical implications are coherent with the findings and conclusions of the paper based on the correlation between the theoretical framework and the descriptive statistics regarding youth's use of social media platforms to shop and engage with apparel products and brands.

12. The limitations of the study

The study's correlation between telepresence, social presence and customer participation is prone to limitations such as the generality of the demographics and cultural context because it emphasizes the use of social media in marketing and purchasing apparel products. The oversimplification of the social media platforms in terms of users poses a constraint to the study because the grouping context might not collectively apply (Hu and Qin, 2018). Second, the study's use of self-reported data in a questionnaire restricts the research due to response bias associated with collecting incorrect data (Andrade, 2021). The study's respondents might answer the questionnaire based on social perceptions rather than the actual context of the study. Finally, the study utilizes a cross-sectional design of evaluating underlying relationships between telepresence, social presence and customer participation, constraining the study's ability to evaluate the impact of the specific variables (Shao, 2023). In this case, there might be other influences causing the target group to utilize social media platforms to engage with brands and purchase apparel products not covered in the theoretical framework or the descriptive statistics.

13. Directions for future research

The study proposes an optimistic course for further research attributed to the correlation between the concepts of telepresence, social presence, consumer involvement and demographic factors such as age and technological advancements. Further research on the association between these factors would provide accurate and specific insights into the dynamics influencing marketing and sales in the apparel industry (Cai and Choi, 2023). Second, the study proposes a longitudinal study about the factors influencing customers' behavior regarding social media platforms. A longitudinal analysis of the influencing dynamics would establish comprehensive insights about the elements impelling consumers in the apparel industry (Shao, 2023). The study would help identify external factors influencing the change in customers' behavior regarding apparel products. In this case, the study's future research necessitates an in-depth analysis of the intricacies of customer-brand interactions in the real digital world, considering all the possible dynamics affecting the interaction.

14. Conclusion

The recent evolvments in telepresence, social presence and consumer involvement have had an essential influence on CBE, and CBE had an impact on the intention to purchase in which future learning will take place. Results showed that the framework suggested successfully showed the effects of telepresence, social presence, consumer involvement

and CBE and, ultimately, intention to purchase; all the results proved to be positive among each other.

Previously these relationships were discussed from different perspectives (Algharabat *et al.*, 2018), and here in this research, previous literature again proved significant. Finally, these findings can significantly support brands to use these variables to create an environment that fits with customer interaction and intention to purchase, in which brands are more likely to use online sources to enhance their customers' intention to purchase. This study makes a major contribution to the brand's marketing and sales literature. Furthermore, researchers can examine the outcomes from the brand's point of view instead of the customer's point of view. Future researchers are encouraged to study these variables from different perspectives and industries.

References

- Aksoy, L., van Riel, A., Kandampully, J., Wirtz, J., Den Ambtman, A., Bloemer, J., Z. ... Gurhan Canli (2013), "Managing brands and customer engagement in online brand communities", *Journal of Service Management*, Vol. 24 No. 3, pp. 223-244, doi: [10.1108/09564231311326978](https://doi.org/10.1108/09564231311326978).
- Alalwan, A.A., Rana, N.P., Dwivedi, Y.K. and Algharabat, R. (2017), "Social media in marketing: a review and analysis of the existing literature", *Telematics and Informatics*, Vol. 34 No. 7, pp. 1177-1190, doi: [10.1016/j.tele.2017.05.008](https://doi.org/10.1016/j.tele.2017.05.008).
- Algharabat, R.S. (2018), "The role of telepresence and user engagement in co-creation value and purchase intention: online retail context", *Journal of Internet Commerce*, Vol. 17 No. 1, pp. 1-25, doi: [10.1080/15332861.2017.1422667](https://doi.org/10.1080/15332861.2017.1422667).
- Algharabat, R., Rana, N.P., Dwivedi, Y.K., Alalwan, A.A. and Qasem, Z. (2018), "The effect of telepresence, social presence and involvement on consumer brand engagement: an empirical study of non-profit organizations", *Journal of Retailing and Consumer Services*, Vol. 40, pp. 139-149, doi: [10.1016/j.jretconser.2017.09.011](https://doi.org/10.1016/j.jretconser.2017.09.011).
- Aljuhmani, H.Y., Elrehail, H., Bayram, P. and Samarah, T. (2022), "Linking social media marketing efforts with customer brand engagement in driving brand loyalty", *Asia Pacific Journal of Marketing and Logistics*, Vol. 35 No. 7, pp. 1719-1738, doi: [10.1108/apjml-08-2021-0627](https://doi.org/10.1108/apjml-08-2021-0627).
- Andrade, C. (2021), "The inconvenient truth about convenience and purposive samples", *Indian Journal of Psychological Medicine*, Vol. 43 No. 1, pp. 86-88, doi: [10.1177/0253717620977000](https://doi.org/10.1177/0253717620977000).
- Barta, S., Gurrea, R. and Flavián, C. (2023), "Telepresence in live-stream shopping: an experimental study comparing Instagram and the metaverse", *Electronic Markets*, Vol. 33 No. 1, p. 29, doi: [10.1007/s12525-023-00643-6](https://doi.org/10.1007/s12525-023-00643-6).
- Bianchi, C. and Andrews, L. (2018), "Consumer engagement with retail firms through social media: an empirical study in Chile", *International Journal of Retail & Distribution Management*, Vol. 46 No. 4, pp. 364-385, doi: [10.1108/IJRDM-02-2017-0035](https://doi.org/10.1108/IJRDM-02-2017-0035).
- Bowden, J. (2009), "The process of customer engagement: a conceptual framework", *Journal of Marketing Theory and Practice*, Vol. 17 No. 1, pp. 63-74, doi: [10.2753/MTP1069-6679170105](https://doi.org/10.2753/MTP1069-6679170105).
- Brodie, R.J., Hollebeek, L.D., Jurić, B. and Ilić, A. (2011), "Customer engagement: conceptual domain, fundamental propositions, and implications for research", *Journal of Service Research*, Vol. 14 No. 3, pp. 252-271, doi: [10.1177/1094670511411703](https://doi.org/10.1177/1094670511411703).
- Cai, Y.-J. and Choi, T.-M. (2023), "Omni-channel marketing strategy in the digital platform era", *Journal of Business Research*, Vol. 168, p. 114197, doi: [10.1016/j.jbusres.2023.114197](https://doi.org/10.1016/j.jbusres.2023.114197).
- Coyle, J.R. and Thorson, E. (2001), "The effects of progressive levels of interactivity and vividness in web marketing sites", *Journal of Advertising*, Vol. 30 No. 3, pp. 75-77, doi: [10.1080/00913367.2001.1067364](https://doi.org/10.1080/00913367.2001.1067364).
- Dwivedi, A. (2015), "A higher-order model of consumer brand engagement and its impact on loyalty intentions", *Journal of Retailing and Consumer Services*, Vol. 24 No. C, pp. 100-109, doi: [10.1016/j.jretconser.2015.02.007](https://doi.org/10.1016/j.jretconser.2015.02.007).
- Franke, G. and Sarstedt, M. (2019), "Heuristics versus statistics in discriminant validity testing: a comparison of four procedures", *Internet Research*, Vol. 29 No. 3, pp. 430-447.

- Gefen, D. and Straub, D.W. (2004), "Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-Products and e-Services", *Omega*, Vol. 32 No. 6, pp. 407-424.
- Gunawardena, C.N. (1995), "Social presence theory and implications for interaction and collaborative learning in computer conferences", *International Journal of Educational Telecommunications*, Vol. 1 No. 2, pp. 147-166.
- Guo, H., Rusli, R.D. and Aris, A. (2023), "Remodeling the traditional fashion industry in the era of industry 4.0", *International Journal of Global Optimization and Its Application*, Vol. 2 No. 3, pp. 165-178, doi: [10.56225/ijgoia.v2i3.259](https://doi.org/10.56225/ijgoia.v2i3.259).
- Gupta, S., Allen, R., Basu, M., Durão, F.A., Gupta, A.Y., Katsarska, M., Schuller, S., Seed, J. and Tu, P.H. (2020), *Social Analysis and the COVID-19 Crisis: A Collective Journal*, Routledge India.
- Hassanein, K. and Head, M. (2005), "The impact of infusing social presence in the web interface: an investigation across product types", *International Journal of Electronic Commerce*, Vol. 10 No. 2, pp. 31-55, doi: [10.2753/JEC1086-4415100202](https://doi.org/10.2753/JEC1086-4415100202).
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Hirschman, E.C. and Holbrook, M.B. (2016), "Consumption: hedonic concepts", *Journal of Marketing*, Vol. 46 No. 3, pp. 92-101.
- Hollebeek, L. (2011a), "Exploring customer brand engagement: definition and themes", *Journal of Strategic Marketing*, Vol. 19 No. 7, pp. 555-573, doi: [10.1080/0965254X.2011.599493](https://doi.org/10.1080/0965254X.2011.599493).
- Hollebeek, L.D. (2011b), "Demystifying customer brand engagement: exploring the loyalty nexus", *Journal of Marketing Management*, Vol. 27 Nos 7/8, pp. 785-807, doi: [10.1080/0267257X.2010.500132](https://doi.org/10.1080/0267257X.2010.500132).
- Hollebeek, L.D., Glynn, M.S. and Brodie, R.J. (2014), "Consumer brand engagement in social media: conceptualization, scale development and validation", *Journal of Interactive Marketing*, Vol. 28 No. 2, pp. 149-165, doi: [10.1016/j.intmar.2013.12.002](https://doi.org/10.1016/j.intmar.2013.12.002).
- Hong, E., Park, J., Jaroenwanit, P., Siriyota, K. and Sothonvit, A. (2023), "The effect of customer ethnocentrism and customer participation on global brand attitude: the perspective of Chinese customer", *Journal of Retailing and Consumer Services*, Vol. 70, p. 103167, doi: [10.1016/j.jretconser.2022.103167](https://doi.org/10.1016/j.jretconser.2022.103167).
- Hu, Z. and Qin, J. (2018), "Generalizability of causal inference in observational studies under retrospective convenience sampling", *Statistics in Medicine*, Vol. 37 No. 19, pp. 2874-2883, doi: [10.1002/sim.7808](https://doi.org/10.1002/sim.7808).
- Khan, I., Dongping, H. and Wahab, A. (2016), "Does culture matter in effectiveness of social media marketing strategy? An investigation of brand fan pages", *Aslib Journal of Information Management*, Vol. 68 No. 6, pp. 694-715, doi: [10.1108/ajim-03-2016-0035](https://doi.org/10.1108/ajim-03-2016-0035).
- Kim, H.W., Gupta, S. and Koh, J. (2011), "Investigating the intention to purchase digital items in social networking communities: a customer value perspective", *Information & Management*, Vol. 48 No. 6, pp. 228-234, doi: [10.1016/j.im.2011.05.004](https://doi.org/10.1016/j.im.2011.05.004).
- Kreijns, K., Kirschner, P.A., Jochems, W. and Van Buuren, H. (2004), "Determining sociability, social space, and social presence in (A)synchronous collaborative groups", *CyberPsychology & Behavior*, Vol. 7 No. 2, pp. 155-172, doi: [10.1089/109493104323024429](https://doi.org/10.1089/109493104323024429).
- Kwon, E. and Mattila, A.S. (2015), "The effect of self-brand connection and self-construal on brand lovers' word of mouth (WOM)", *Cornell Hospitality Quarterly*, Vol. 56 No. 4, pp. 427-435, doi: [10.1177/1938965514566071](https://doi.org/10.1177/1938965514566071).
- Kyriazos, T. and Poga, M. (2023), "Dealing with multicollinearity in factor analysis: the problem, detections, and solutions", *Open Journal of Statistics*, Vol. 13 No. 3, pp. 404-424, doi: [10.4236/ojs.2023.133020](https://doi.org/10.4236/ojs.2023.133020).
- Leckie, C., Nyadzayo, M.W. and Johnson, L.W. (2016), "Antecedents of consumer brand engagement and brand loyalty", *Journal of Marketing Management*, Vol. 32 Nos 5/6, pp. 558-578, doi: [10.1080/0267257X.2015.1131735](https://doi.org/10.1080/0267257X.2015.1131735).
- Lim, J. and Ayyagari, R. (2018), "Investigating the determinants of telepresence in the e-commerce setting", *Computers in Human Behavior*, Vol. 85, pp. 360-371, doi: [10.1016/j.chb.2018.04.024](https://doi.org/10.1016/j.chb.2018.04.024).
- Lowenthal, P.R. (2011), "Social presence", *Social Computing*, doi: [10.4018/9781605669847.ch011](https://doi.org/10.4018/9781605669847.ch011)

- Mollen, A. and Wilson, H. (2010), "Engagement, telepresence and interactivity in online consumer experience: reconciling scholastic and managerial perspectives", *Journal of Business Research*, Vol. 63 Nos 9/10, pp. 919-925, doi: [10.1016/j.jbusres.2009.05.014](https://doi.org/10.1016/j.jbusres.2009.05.014).
- Novak, T.P., Hoffman, D.L., Yung, Y., Novak, T.P. and Hoffman, D.L. (2016), "Approach linked references are available on JSTOR for this article: measuring the customer experience in online environments: a structural modeling approach", *Marketing Science*, Vol. 19 No. 1, pp. 22-42, doi: [10.1038/nature00858](https://doi.org/10.1038/nature00858).
- Picciano, A.G. (2002), "Beyond student perceptions: issues of interaction, presence, and performance in an online course", *Journal of Asynchronous Learning Networks*, Vol. 6 No. 1, pp. 21-40.
- Risitano, M., Romano, R., Sorrentino, A. and Quintano, M. (2017), "The impact of consumer-brand engagement on brand experience and behavioural intentions: an Italian empirical study", *British Food Journal*, Vol. 119 No. 8, pp. 1884-1896, doi: [10.1108/BFJ-11-2016-0579](https://doi.org/10.1108/BFJ-11-2016-0579).
- Roberts, J.A. and David, M.E. (2023), "Instagram and TikTok flow states and their association with psychological Well-Being", *Cyberpsychology, Behavior, and Social Networking*, Vol. 26 No. 2, pp. 80-89, doi: [10.1089/cyber.2022.0117](https://doi.org/10.1089/cyber.2022.0117).
- Rourke, L. and Anderson, T. (2007), "Assessing social presence in asynchronous text-based computer", *Elements*, Vol. 14, pp. 1-18, available at: <http://auspace.athabascau.ca:8080/dspace/handle/2149/732>
- Schnack, A., Wright, M.J. and Holdershaw, J.L. (2020), "An exploratory investigation of shopper behaviour in an immersive virtual reality store", *Journal of Consumer Behaviour*, Vol. 19 No. 2, pp. 182-195, doi: [10.1002/cb.1803](https://doi.org/10.1002/cb.1803).
- Shao, Z. (2023), "How the characteristics of social media influencers and live content influence consumers' impulsive buying in live streaming commerce? The role of congruence and attachment", *Journal of Research in Interactive Marketing*, Vol. 18 No. 3, pp. 506-527, doi: [10.1108/jrim-08-2023-0277](https://doi.org/10.1108/jrim-08-2023-0277).
- Shih, C. (1998), "Conceptualizing consumer experiences in cyberspace", *European Journal of Marketing*, Vol. 32 Nos 7/8, pp. 655-663, doi: [10.1108/03090569810224056](https://doi.org/10.1108/03090569810224056).
- Sprott, D., Czellar, S. and Spangenberg, E. (2009), "The importance of a general measure of brand engagement on market behavior: development and validation of a scale", *Journal of Marketing Research*, Vol. 46 No. 1, pp. 92-104, doi: [10.1509/jmkr.46.1.92](https://doi.org/10.1509/jmkr.46.1.92).
- Team, I. (2014), "Social presence theory", Cornerstone Minnesota State University, 4, available at: http://cornerstone.lib.mnsu.edu/cgi/viewcontent.cgi?article=1001&context=isalt_resources
- Thomson, M., MacInnis, D.J. and Park, C.W. (2005), "The ties that bind: measuring the strength of consumers' emotional attachments to brands", *Journal of Consumer Psychology*, Vol. 15 No. 1, pp. 77-91, doi: [10.1207/s15327663jcp1501_10](https://doi.org/10.1207/s15327663jcp1501_10).
- Trivedi, J., Kasilingam, D., Arora, P. and Soni, S. (2022), "The effect of augmented reality in mobile applications on consumers' online impulse purchase intention: the mediating role of perceived value", *Journal of Consumer Behaviour*, Vol. 21 No. 4, pp. 896-908, doi: [10.1002/cb.2047](https://doi.org/10.1002/cb.2047).
- Van der Westhuizen, L.M. (2018), "Brand loyalty: exploring self-brand connection and brand experience", *Journal of Product & Brand Management*, Vol. 27 No. 2, pp. 172-184, doi: [10.1108/JPBM-07-2016-1281](https://doi.org/10.1108/JPBM-07-2016-1281).
- Vazquez, E.E., Patel, C., Alvidrez, S. and Siliceo, L. (2023), "Images, reviews, and purchase intention on social commerce: the role of mental imagery vividness, cognitive and affective social presence", *Journal of Retailing and Consumer Services*, Vol. 74, p. 103415, doi: [10.1016/j.jretconser.2023.103415](https://doi.org/10.1016/j.jretconser.2023.103415).
- Virginie Lavoye, S., Tarkiainen, A., Sipilä, J. and Mero, J. (2023), "More than skin-deep: the influence of presence dimensions on purchase intentions in augmented reality shopping", *Journal of Business Research*, Vol. 169, pp. 114247-114247, doi: [10.1016/j.jbusres.2023.114247](https://doi.org/10.1016/j.jbusres.2023.114247).
- Vivek, S.D., Beatty, S.E. and Morgan, R.M. (2012), "Customer engagement: exploring customer relationships beyond purchase", *Journal of Marketing Theory and Practice*, Vol. 20 No. 2, pp. 122-146, doi: [10.2753/MTP1069-6679200201](https://doi.org/10.2753/MTP1069-6679200201).
- Wells, L.G., Van Auken, S. and Ritchie, W.J. (2008), "Russian advertising attitudes: reassessing the Two-Factor model", *Journal of International Consumer Marketing*, Vol. 1530, pp. 37-41, doi: [10.1300/J046v20n02](https://doi.org/10.1300/J046v20n02).
- Woo, H., Shin, D.C., Kim, N., Tong, Z. and Kwon, S. (2024), "Can sharing with others whom consumers can't see increase their sense of community? An examination of social presence on sharing platforms", *Journal of Retailing and Consumer Services*, Vol. 76, pp. 103614-103614, doi: [10.1016/j.jretconser.2023.103614](https://doi.org/10.1016/j.jretconser.2023.103614).

Ye, S., Lei, S.I., Shen, H. and Xiao, H. (2020), "Social presence, telepresence and customers' intention to purchase online peer-to-peer accommodation: a mediating model", *Journal of Hospitality and Tourism Management*, Vol. 42, pp. 119-129.

Yeboah, A., Agyekum, O., Owusu-Prempeh, V. and Prempeh, K.B. (2023), "Using social presence theory to predict online consumer engagement in the emerging markets", *Future Business Journal*, Vol. 9 No. 1, p. 69, doi: [10.1186/s43093-023-00250-z](https://doi.org/10.1186/s43093-023-00250-z).

Ying, T., Tang, J., Ye, S., Tan, X. and Wei, W. (2022), "Virtual reality in destination marketing: telepresence, social presence, and tourists' visit intentions", *Journal of Travel Research*, Vol. 61 No. 8, pp. 1738-1756.

Yoo, Y. and Alavi, M. (2001), "Yoo & Alavi/media and group cohesion MIS Q La r t e l media and group cohesion: relative influences on social presence, task participation, and group Consensus1", *Source: MIS Quarterly*, Vol. 25 No. 3, pp. 371-390, available at: www.jstor.org/stable/3250922 <http://www.jstor.org/page/info/about/policies/terms.jsp>

Zaichkowsky, J.L. (1985), "Measuring the involvement construct linked references are available on JSTOR for this article: measuring the involvement construct", *Journal of Consumer Research*, Vol. 12 No. 3, pp. 341-352, doi: [10.3758/BF03200970](https://doi.org/10.3758/BF03200970).

Further reading

Cowan, K. and Ketron, S. (2019), "A dual model of product involvement for effective virtual reality: the roles of imagination, co-creation, telepresence, and interactivity", *Journal of Business Research*, Vol. 100, pp. 483-492, doi: [10.1016/j.jbusres.2018.10.063](https://doi.org/10.1016/j.jbusres.2018.10.063).

Goldsmith, R.E., Flynn, L.R. and Clark, R.A. (2011), "Materialism and brand engagement as shopping motivations", *Journal of Retailing and Consumer Services*, Vol. 18 No. 4, pp. 278-284, doi: [10.1016/j.jretconser.2011.02.001](https://doi.org/10.1016/j.jretconser.2011.02.001).

Osei-Frimpong, K. and McLean, G. (2018), "Examining online social brand engagement: a social presence theory perspective", *Technological Forecasting and Social Change*, Vol. 128, pp. 10-21, doi: [10.1016/j.techfore.2017.10.010](https://doi.org/10.1016/j.techfore.2017.10.010).

Pongpaew, W., Speece, M. and Tiangsoongnarn, L. (2017), "Social presence and customer brand engagement on Facebook brand pages", *Journal of Product & Brand Management*, Vol. 26 No. 3, pp. 262-281, doi: [10.1108/JPBM-08-2015-0956](https://doi.org/10.1108/JPBM-08-2015-0956).

Rana, N.P., Alalwan, A.A., Baabdullah, A., Algharabat, R. and Gupta, A. (2020), "Investigating the antecedents of customer brand engagement and consumer-based brand equity in social media", *Journal of Retailing and Consumer Services*, Vol. 53, p. 101767, doi: [10.1016/j.jretconser.2019.01.016](https://doi.org/10.1016/j.jretconser.2019.01.016).

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