Special Section Article

Impact of Virtual Try-On Technology on Customer's Mental Imagery During COVID-19

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Abstract

During the lockdown period of this pandemic, online retailing is getting the place of offline retail. This study provides an insight about the mental imagery of customers toward the new developing technology: virtual try-on. This descriptive study provides empirical evidence that virtual try-on technology influences the customer's mental imagery toward the product presented on an online platform. Primary data were collected from 142 online customers of the Delhi NCR region. Various journals, websites, and reports were used to collect secondary data. Mean, standard deviation, and one sample *t*-test were used to study the significance of different dimensions on mental imagery toward virtual try-on technology in this pandemic period. Three dimensions of mental imagery have been studied, namely "vividness, quantity, and elaboration." The findings of this study show that virtual try-on technology positively influences all the dimensions of mental imagery. E-tailers might get help from these findings and frame their strategies accordingly to attract more traffic on their website, increase sales outcomes, and get competitive advantages during and after this pandemic.

Keywords

Augmented reality, virtual try-on, mental imagery, vividness, elaboration

JEL Classification: M31, O33, O31, O32

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Introduction

As social creatures, people not only come out to shop but for socialization also. This pandemic restricts them to stay at home which raises their anxiety level and change in behavior. COVID-19 pandemic provides an opportunity to develop and increase the use of new emerging technology such as augmented reality (AR), virtual reality (VR), and mixed reality. These technologies enable people to talk, shop, and socialize virtually, and this happened due to more usage of smartphones and high internet connectivity (cio.economictimes.indiatimes.com). Various innovative technological means provide an interactive shopping environment in online retail. Retailers are adopting new visualization means such as try-on, 3D, video, and zoom to provide more experiential values and sensory experience. In e-tailing, where direct interactivity with the product is not possible, new emerging visualization technologies not only lead to more traffic on the website but also enhance the decision-making of customers (Park & Yoo, 2020; Yoo & Kim, 2014). Retailers should put more effort and find solution to how an online product can lead to a better virtual experience (Yoo & Kim, 2014). A product presented in a good manner on an online platform evokes better cognitive and affective customer response, which influences outcome and customer's experience. Experiential values include "sensory, emotional, cognitive, and satisfaction." Products which require higher need to touch, like apparel shoppers, prefer to buy these from offline stores, and products which require low need to touch before buying attracts more customers to purchase it from e-tail platform (Yoo & Kim, 2014). New product presentation technologies provide more interactivity (Park & Yoo, 2020; Yoo & Kim, 2014) and vividness to the customer than the static picture of the product. Lack of sensory experience is a major problem in e-tail (Yoo & Kim, 2014).

Like other technologies such as laptops and smartphones, AR is a fully developed technology that was not widespread earlier. But this COVID-19 pandemic and lockdown period increased its adoption and use. As per experts, in the last few months, this worldwide pandemic created more interest toward AR through smartphones to engage more customers and enhance their unique digital experience during this COVID-19 pandemic. Jewelry retailer (Tanishq) recently launched "phygital features" that depicted both physical as well as digital features. It promotes contactless selling by adopting AR such as "video calling, live assisted chats, and virtual try-on" to increase customer's experience and safety during this COVID-19 pandemic. Virtual try-on enables the customer to try products (necklaces, earrings, and pendants) virtually (indianexpress.com). A mismatch between the customer expectation and the product provides reason for purchase return. Virtual try-on technology provides more personalized shopping and prevents product return which is 25%–40% for most retailers (indiaai.gov.in). AR provides customize shopping experiences and virtual try-on for jewelry, eyewear, and apparel of different brands with 3D model creation and increase immersion in this pandemic period. COVID-19 increases the possibility for advancement in AR technology, touch-free shopping, and try-on of product in the virtual platform. In the COVID-19 period, the growth of fashion industry witnessed a decrease from 3% to 4% (MGFI).[1] Virtual try-on provides an integrated

view of virtual mirror and color try-on that helps the customer get a good shopping experience; it reduces the problem of match and fit. Customer's ways to shop the product are changing due to COVID-19 because they avoid direct interaction and tester of products. Hence, customers would like to use virtual try-on both at online platform and store environment.

After studying different articles and previous studies, the research gap is to find whether virtual try-on technology provides clear, sharp, and more number of mental images to the customers which will help them to elaborate product information. The objective of this study is to empirically examine whether virtual try-on activates the mental imagery by affecting the different dimensions of mental imagery. As per previous literature, mental imagery is a latent construct that includes "vividness, quantity, and elaboration." Research questions of this study are as follows: (a) Does virtual try-on provide more vivid product images? (b) Does virtual try-on provide a number of product images? (c) Does virtual try-on help imagine herself/himself as part of the image? This study contributes to the field of marketing and helps to understand the consumers' response toward this new emerging technology in terms of their mental imagination.

The rest part of this article is organized as follows. The first section is "Conceptual Development and Literature Review." The next section is the "Hypothesis Development" followed by "Research Methodology" section. The fifth section is "Discussion and Conclusion" that includes theoretical and managerial implications also.

Conceptual Development and Literature Review

Augmented Reality

AR is defined as "a technology which allows computer-generated virtual imagery to exactly overlay physical objects in real-time" (Zhou et al., 2008). "Augmented reality (AR) refers to the integration of the actual world with digital information about it" (Farshid et al., 2018). AR is also described as an immersive technology. Immersive technology is defined as "technology that blurs the boundary between the physical and virtual world and enables the user to experience a sense of immersion" (Suh & Prophet, 2018). It is a virtual–reality continuum and available easily on smartphones. AR technology is widely emerging in different sectors such as engineering, health care, education, real estate, military, video games, and retail industry (Park & Yoo, 2020).

Nowadays adoption of AR technology is increasing by the marketers as a means to display products. Like a screen displays both the product and customer's images wearing that product with physical surroundings through a virtual fitting room. It enables to display product with real surroundings wherever the customer is through AR apps (Sun et al., 2019). Customers can try a product online before buying it with real surroundings wherever the customer is through AR "virtual try-on" app on smart devices. Different studies describe the different features of AR such as "virtuality, mobility, synchronization and location-specificity" (Sun et al., 2019). Bonetti et al. (2018) stated that AR mixes the online and physical worlds. A digital camera such as webcam and mobile devices enable AR to blend

the real data with the online information and get customer attention because now customers can interact with online products which enhance their experiential values and buying intention. In retailing, AR technology is used at different touch points, namely "physical, mobile, and online." AR facilitates more interactivity, immersion, enjoyment, and fun experience. Face-to-face interaction is not possible in an online environment. Without visiting an offline store, AR technology provides more understanding and reliability. Interactivity and funny experience in the purchase process leads to more customer involvement, and this makes the customer feel that they are in an offline store (Park & Yoo, 2020).

Mental Imagery

"Mental activity that visualizes a concept or relationship" is called mental imagery. It is a quasi-perceptual experience (Choi & Taylor, 2014; Ha et al., 2019; Park & Yoo, 2020) that evokes sensory information in the customer's mind because stimulus activates the mental imagery (Park & Yoo, 2020). It is a stimulation in the customer's imagination, and people have a feel of experience in a given milieu without any other external stimuli (Ha et al., 2019). Mental imagery is defined as "mental invention or recreation of an experience that in at least some respect resembles the experience of actually perceiving an object or an event, either in conjunction with, or, in the absence of direct sensory stimulation" (Neck & Manz, 1992).

Mental imagery evokes when information stored in the mind is processed and creates an experience such as "seeing with the mind's eye" and "hearing with mind's ear." Mental imagery makes an individual able to elicit sensory stimulus when it is not present in actual. Mental imagery activates the imagination in the brain. As per mental imagery theory, people combine present perceptual information with past experiences. It does not mean that mental imagery is related only with past perceived actions or stimuli, but it is evoked by modifying perceptual information in new innovative ways. Customer combines new information available in the present with past similar product experience and imagines a product which is never seen by them in actual. The way of product presentation also has an impact on mental imagery (Overmars & Poels, 2015).

In mobile advertisement, mental imagery affects cognitive and affective behavioral dimensions of customer response such as "ad recall, attitude toward the brand, attitude toward the ad, attention, brand belief and brand recall, intention, their duration and feelings also" (Gavilan et al., 2014). Mental imagery evokes pre-experiencing also; it means people can imagine what they did not experience in the past. In the context of online retailing, mental imagery evokes different images in the mind of the customer which acts as an information source, and they can predict future experience and make a purchase decision.

Dimensions of Mental Imagery. Mental imagery has different dimensions. As a multidimensional concept, it consists of elaboration, quality (Ha et al., 2019; Park & Yoo, 2020; Yoo & Kim, 2014) "vividness, quantity and elaboration" (Gavilan et al., 2014). Elaboration means the number of images that comes into a customer's

mind when they process the available information (Park & Yoo, 2020). Quality means clarity and vividness of these images in their mind (Park & Yoo, 2020).

Initially, Bone and Ellen (1992) identified only two dimensions of mental imagery: vividness and quantity. Later, another dimension called "elaboration" was added to this model (Babin & Burns, 1998). Vividness means "clarity with which a consumer evokes an image. It means capturing the qualitative facet of mental imagery" (Bone & Ellen, 1992). Quantity means "the number of images that a consumer generates from a stimulus while processing information" (Bone & Ellen, 1992). Later researchers consider quantity as a part of elaboration. Elaboration refers to "the activation of stored information in the production of mental images beyond what is provided by the stimuli" (Babin & Burns, 1998). Walters et al. (2007) stated that two dimensions of mental imagery were quality and elaboration. Quality means "vividness, intensity, and clarity of the images," and elaboration means "the degree to which one develops images in his/her mind after viewing an object" (Ha et al., 2019).

Literature Review

According to Wu and Li (2021), retailers need to pay attention on the online presentation of a product to introduce, provide information related to it, and to show its features. They stated that good quality images play key role in purchase decision and make it easy for the e-shoppers to process information. They depicted mental imagery as a "sensory and sometimes, a multisensory process" (which includes different senses such as sound, touch, smell, taste, and sight). They argued that concrete image provides clear, sharp, vivid, intense, and visual appeal. They proposed that mental imagery is high in concrete background as compared to solid background because concrete background provides more concrete and vivid information which draws attention, increases imagination, and evokes "consumer sensory experience" which results mental imagery.

Huang and Ha (2021) argued that visual content is the core for online environment. They stated that mental imagery is a "primary concept that explains the processes through which consumer perceptions of information content affect subsequent responses." They highlighted the role of social media as a tool of communication which provides visual information in such a way that engages consumers and increases their interactivity that immersed them. This visual information and images evoke imagery for the content. Mental imagery increases the cognitive value like perceived usefulness. So, the marketer should provide content in such a way that increases mental imagery, like picture of a product with real life experience along with a text message.

Skard et al. (2021) showed that the vividness and interactivity of virtual world objects form the mental imagery. Destination picture with VR increases the telepresence (as they are present in the real environment) and mental imagery. They stated that telepresence is a psychological state and mental imagery as information processing which occurs immediately while interacting with the online world. Skard et al. (2021) argued that the results support the notion that mental imagery "offers a sensory and emotional surrogate of consumption

experience, it stands to reason that (it) may influence attitude strength enough affective response."

Lao et al. (2021) examined the effects of "sensorial, pragmatic, cognitive, and social" dimensions of customer experience on "shopping value, self-mental imagery, and behavioral intention." They also studied the mediating role of shopping values (hedonic, utilitarian, and social) and self-mental imagery between the customer experience and behavioral intentions (word of mouth and purchase intention). They found that all the dimensions of customer experience have favorable influence on the self-mental imagery. They stated that except social dimension, all other dimensions of customer experience influence utilitarian values significantly. All the dimensions of shopping value are significantly influenced by the sensorial experience. They highlighted that social and sensorial dimensions have significant positive influence on social and hedonic values. Self-mental imagery has positive influence on behavioral intentions. Except the influence of cognitive dimension on purchase intention, mental imagery worked as a mediator between other dimensions of customer experience and "behavioral intentions."

Cheng and Toung (2021) defined mental imagery fluency as "the subjective ease with which one can imagine hypothetical scenarios that have not yet occurred." They stated it as a thinking fluency of consumers and the sensations derived while thinking. Mental imagery fluency is meta-cognitive experience that evokes consumers' opinion, their attitude. They can consider and process the information easily. Easiness of imagination leads to subjective probability that evokes consumer's purchase intention. Way of product presentation, vividness, consumers' ability to explore, and their cognitive ability influence the mental imagery fluency. Consumers' preference can be strengthened by providing more vivid and imaginative appeals of product description. Imaginative appeals lead to favorable attitude and purchase intention.

Ha et al. (2019) conducted two studies to find the effect of mental imagery on "brand SNS attitude." They collected data from a web-based survey design. "Positive affect" works as a mediator between the dimensions of mental imagery and brand SNS attitude, and transportability works as a moderator between dimensions of mental imagery and "brand SNS attitude and positive affect." They stated that the activation of visionary and imaginary mental images is elaboration, vividness, sharpness, clarity, and intensity of mental images are quality. They argued that if stimuli have more mental imagery, then the attitudes, behavioral intentions, and beliefs are also more. They recommended that the content provided by the "social networking sites" should be filled with quality and elaboration, which develops mental imagery so the users can perceive themselves as a part of that content.

Khrouf and Frikha (2016) explored that different stimuli of the website influence the behavior of web-surfers that increases the website vividness. These stimuli are layout, color, and space. They stated mental imagery as multisensory (which includes taste, hearing, sight, smell, and touch) and multidimensional. Mental imagery affects reactions of users in a given milieu, like color used on website influences web-surfers. They studied the effect of "website dominant hue on mental imagery." They found that mental imagery plays mediating role between "dominant website's hue and web-surfers conative response." They stated that congruency between content and website hue leads to activation of mental

imagery. Mental images activated through congruency influence the conative response of web-surfers the most.

Hypothesis Development

Skard et al. (2021) showed the influence of VR on the travel intentions. They conducted an experiment and studied that VR leads more mental imagery when the level of telepresence is high. They also studied that VR influence predicted happiness through the telepresence and mental imagery. They found that VR leads to more telepresence, stronger mental imagery, and the predicted happiness was also stronger in the VR environment. They stated that VR has a significant effect on mental imagery when telepresence works as a mediator. Predicted happiness was also high when the relation was mediated by mental imagery and telepresence. VR also has a positive influence on the behavioral intention. Mediating role of "telepresence, mental imagery, and predicted happiness" leads to positive influence of VR on the "behavioral intention and actual purchase."

Wu et al. (2020) studied the effect of product presentation on purchase intention in online retailing. They conducted an experimental study and found that the way (video and text) influences mental imagery. They also highlighted the indirect influence of mental imagery on purchase intention. Further mental imagery has an indirect influence on purchase intention which is mediated by perceived social risk and positive emotions. They stated that the presentation of product features through video, and pictures have more influence on mental imagery than the features presented only in the text forms. Hence, concrete picture presentation influences mental imagery more than textual information.

Park and Yoo (2020) studied the relationship between "mental imagery and consumer response" in the context of mobile shopping. They took two dimensions of mental imagery "elaboration and quality" and "customer attitude and behavioral intention" as consumer response. They conduct a survey in South Korea on female consumers and studied the impact of AR interactivity on consumer response through mental imagery. Structural equation modeling (SEM) results indicate that the two dimensions of interactivity, "controllability and playfulness," have a positive effect on both the dimensions of mental imagery, "elaboration and quality." The attitude of customers toward the product is significantly affected by both the dimensions of mental imagery, and this attitude further influences the behavioral intention.

Ha et al. (2019) took two dimensions of mental imagery, "elaboration and quality," in their study. They conducted a web-based survey and analyzed that whether mental imagery influences attitude toward brand SNS. SEM was conducted by them, and it was found that quality has a significant influence on the attitude of brand SNS, but elaboration does not have this significant relationship. "Positive effect" works as a mediator between dimensions of mental imagery and the brand SNS attitude. Both dimensions have a significant positive effect on brand SNS attitude when this relationship is mediated by "positive effect."

Choi and Taylor (2014) argued that 3D virtual advertising has more positive influence than 2D advertising for both the high need for touch as well as the low

need for touch. They conducted an experimental study and took only one dimension of mental imagery—"vividness." They studied the mediating effect of mental imagery on attitude and intentions. They found that "site type" has a significant impact on mental imagery. When both site type and mental imagery regressed simultaneously, it reduced the effect of site type. Hence, mental imagery has a significant mediating effect on all the dependent variables "site attitude, brand attitude, purchase intention, and revisiting intention."

Yoo and Kim (2014) investigated how consumer responses are affected by the online product presentation through mental imagery perspective. They took a sample of college women and experimented. They took two dimensions, that is, "elaboration and quality," of mental imagery in the study. They found out that relevant consumption background helps to evoke mental imagery which increases customer's behavioral intention by producing more emotional responses positively. They also revealed that both the dimensions of mental imagery have a significant direct influence on behavioral intention. Positive emotions act as a partial mediator between them.

Gavilan et al. (2014) conducted experiment research and studied the mediating effect of mental imagery on "ad trust and purchase intention" in mobile advertising. They took three dimensions of mental imagery, that is, "vividness, quantity, and elaboration," as mediators. The results showed that MMS ads evoke more vivid and elaborated mental images than SMS ads. SMS evokes more quantity of mental images than MMS. According to the results shown by the regression model, on the one hand, independent variables—vividness and elaboration—have a positive effect on the dependent variable "purchase intention", however, on the other hand, the effect of quantity is not significant.

Lao (2013) highlighted that product presentation stimuli used in online retail have a significant impact on mental imagery. They found out that when "self-mental imagery" developed by the users is high, there will be a positive user response and the purchase intention toward the product which is presented. Self-mental imagery influences both "hedonic and self-conscious emotions" positively. These emotions further have an impact on user's "impulse purchase" and their purchase intentions.

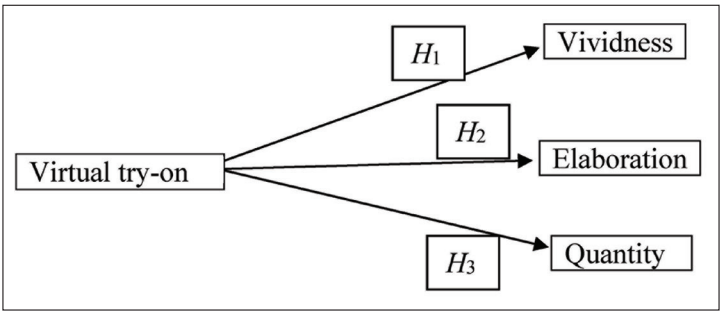
Schlosser (2003) stated that medium helps the shoppers in interaction with the product which increases immersion and vividness in mental images. They found out that mental imagery acts as a mediator between interactivity and purchase intention. Mental imagery information processing system has an important role in influencing the customer's purchase intention. They also found out that cognitive elaboration works as a mediator and has an interaction effect between "site and goal" and "attitude."

Dahl et al. (1999) experimented and studied whether visual mental imagery affects new product design. They found out that visual mental imagery, that is, "imagination imagery and memory imagery," impacts different aspects of new product design. They highlighted that visual mental imagery plays a vital role in the pre-product design and during the design stages, which increases usefulness. They stated that imagination imagery provides a wide and conducive environment for designing creative designs.

Based on the literature review, the following hypotheses were developed.

H_1: Virtual try-on technology has positive effect on the vividness dimension of mental imagery.

H_2: Virtual try-on technology has positive effect on the elaboration dimension of mental imagery.



H_3: Virtual try-on technology has positive effect on the quantity dimension of mental imagery.

Research Methodology

The descriptive research design along with convenience sampling technique was used in this study to measure the influence of virtual try-on on the mental imagery of customers. Three dimensions of mental imagery, namely "vividness, elaboration, and quantity" were taken from the previous studies. This study included 142 participants of the Delhi NCR region to measure the effect of virtual try-on on their mental imagery. To give an insight about Lenskart try-on, steps to try glasses over the Lenskart website and app were explained along with an online questionnaire that helps participants who have not tried it earlier try it now and record their level of agreement.

Questionnaire designing and data analysis procedure: In the first part of the questionnaire, demographic information was collected such as their age, gender, educational level, and online shopping experience (years). In the second part of the questionnaire, 10 statements were used to measure three constructs, "vividness, elaboration, and quantity." These statements were taken from the previous studies. The statements of vividness and elaboration are taken from Walters et al., (2007), and the statements of quantity are adapted from Babin and Burns (1998). A 5-point Likert scale was used to measure participant's level of agreement and disagreement. All the hypotheses H_1, H_2, and H_3 were analyzed by descriptive statistics and one-sample *t*-test in SPSS 21.

Analysis and Interpretation

As per the assumption of the *t*-test, the variables are continuous, and all the observations are independent of each other. There is no outlier in the data set. A

sample size of 142 respondents is taken. "In fact, for a large sample of 120 or more, the *t* distribution and the normal distribution are virtually indistinguishable" (Malhotra et al., 2017).

Table 1 shows the different variables of mental imagery grouped in three factors known as "vividness, quantity, and elaboration." The mean value and standard deviation of different items are shown in Table 1. The mean value shows the average level of agreement, and the variability of responses is shown by the standard deviation. For the first factor (vividness), the mean value of "very sharp images of glasses come in my mind" has the highest mean value ($\bar{X}$ = 4.41) followed by the "provide me very vivid product information" and "very intense images of glasses come in my mind" with a mean value ($\bar{X}$ = 4.27). The variable "very clear and specific images of glasses come in my mind" has the highest variability in response (σ = 0.711). In the second factor (quantity), only two variables are there, and both have the same mean value ($\bar{X}$= 4.32), but the variability of response in the second item "I can imagine many things during virtual try-on" is high (σ = 0.728). In the third factor (elaboration), four variables are there. "Easy to imagine wearing glasses" has the highest mean value ($\bar{X}$= 4.39) and variations in response with a standard deviation (σ = 0.742). The second highest mean value ($\bar{X}$= 4.31) is of item "virtual try-on imagination helps me to construct story about myself and the product." The variable "it seems that I am actually trying the glasses" has the lowest contribution in the factor "elaboration" with a mean value ($\bar{X}$= 4.26). Hence, it is supposed that the variable having the highest mean value influences the mental imagery the most, and those that are having the lowest mean value are the low influencer of mental imagery; same as the variable having the high standard deviation means to have high variability in responses.

Table 2 depicts the various factors of mental imagery with their mean value and standard deviations. Quantity and elaboration dimensions have approximately equal means ($\bar{X}$= 4.316) and ($\bar{X}$= 4.315), respectively. Hence, these evoke more mental imagery than the vividness which has a mean value ($\bar{X}$ = 4.297). Table 2 shows that elaboration has the highest variability in responses with a standard deviation (σ = 0.614) followed by quantity (σ = 0.585) and vividness (σ = 0.519). It means vividness has the highest consistency in responses. All the dimensions of mental imagery are significant and provide insight to the retailer that these should be taken into account while deciding the way of product presentation in the online environment.

Table 3 represents an analysis of mental imagery dimensions based on the *t*-test. A one-sample *t*-test has been run to check whether "vividness" is different from the normal score or not, defined as "vividness" score 3. The mean score of "vividness" (M = 4.297) is higher than the normal "vividness" score of 3, a statistically mean difference of 1.297, 95% CI, t (141) = 29.787, p = .000. Hence, "vividness" is positively affected by "virtual try-on." Again one-sample *t*-test is used in H_2 to check whether "quantity" is different from the normal score or not, defined as a "quantity" score 3. The mean "quantity" score (M = 4.316) is higher than the normal "quantity" score of 3, a statistically mean difference of 1.316, 95% CI, t (141) = 26.829, p = .000. Hence, "quantity" is positively affected by

Table 1. Dimensions of Mental Imagery

Scale Items	M	SD
Vividness		
Very clear and specific images of glasses come in my mind, when I try Lenskart try-on.	4.23	0.711
Very intense images of glasses come in my mind when I try Lenskart try-on.	4.27	0.621
Lenskart try-on provide me very vivid product information.	4.27	0.654
Very sharp images of glasses come in my mind, when I try Lenskart try-on.	4.41	0.665
Quantity		
During virtual try-on many images of product and myself come in my mind.	4.32	0.678
I can imagine many things during virtual try-on.	4.32	0.728
Elaboration		
While using Lenskart try-on, it seems that I am actually trying the glasses.	4.26	0.731
While using Lenskart try-on, it is easy to imagine wearing glasses.	4.39	0.742
While using Lenskart try-on, it seems that I am a part of that image which come in my mind.	4.30	0.714
Virtual try-on imagination helps me to construct story about myself and the product.	4.31	0.716

Source: Primary data.
Note: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

virtual try-on. In H_3 also, one-sample *t*-test is used to check whether "elaboration" is different from the normal score or not, defined as a "elaboration" score 3. The mean "elaboration" score (M = 4.315) is higher than the normal "elaboration" score of 3, a statistically mean difference of 1.315, 95% CI, t (141) = 25.541, p = .000. Hence, "elaboration" is positively affected by virtual try-on. Table 3 depicts that all the hypotheses are accepted and at a 95 % confidence interval all the factors are significant. This implies that all the factors, "vividness, quantity, and elaboration," have a significant contribution in evoking mental imagery toward the product presented through this new developing technology. This means that virtual try-on technology will be beneficial during the pandemic period and after this period also.

Discussion and Conclusion

Discussion

This study highlighted the different variables and dimensions which evoke mental imagery. To attract and engage the customers for a longer time to browse and learn about virtual products, retailers need to provide vivid, clear product images, and

Table 2. Analysis of Mental Imagery Dimension on the Basis of Mean Score: One-Sample Statistics

	N	*M*	*SD*	Std. Error Mean
Vividness	142	4.2975	0.51908	0.04356
Quantity	142	4.3169	0.58491	0.04908
Elaboration	142	4.3151	0.61359	0.05149

Source: Primary data.
Note: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

quality information that helps customers to imagine the product. This study found out that virtual try-on technology of product presentation has positive influence on all the dimensions of mental imagery which leads to the activation of more mental images. Results of our study are consistent with the results of following different studies. Skard et al. (2021) showed that VR induces mental imagery. Lao (2013) and Wu annd Li (2021) found out that the way of product presentation influences mental imagery. Choi and Taylor (2014) showed that "site type" has significant impact on metal imagery. Yoo and Kim (2014) resulted that relevant consumption backgrounds evoke more mental imagery. Gavilan et al. (2014) showed that MMS ads evoke more vivid and elaborated images, but the quantity of images are more in SMS ads. Schlosser (2003) stated that a medium helps to induce more vividness in mental images. Lao et al. (2021) found out that customer experience dimensions, that is, "sensorial, pragmatic, cognitive, and social," also have positive influence on the mental imagery. Huang and Ha (2021) found out that fluency in processing information and images enhances mental imagery. Khrouf and Frikha (2016) found out that congruency between content and website hue causes activation of mental imagery.

Retailers should adopt strategies that increase interactivity with the product (Choi & Taylor, 2014) because interactivity increases imagery of product which leads to a positive attitude toward retailers and the product. In an e-tail environment, mental imagery acts as a key contributor in persuading customers to buy. Gavilan et al. (2014) stated that mental imagery affects cognitive and affective behavior such as "ad recall, attitude toward the brand, attitude toward the ad, attention, brand belief and brand recall, intention, their duration, and feelings." It has a direct effect on consumer's attitudes and their behavioral intention

Table 3. Analysis of Mental Imagery Dimensions on the Basis of *t*-Test One-Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	T	*df*	Sig. (2-tailed)	Mean Difference	Lower	Upper
Vividness	29.787	141	0.000	1.29754	1.2114	1.3837
Quantity	26.829	141	0.000	1.31690	1.2199	1.4139
Elaboration	25.541	141	0.000	1.31514	1.2133	1.4169

Source: Primary data.
Note: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

(Choi & Taylor, 2014). Mental imagery is a key mediator between technology and the consumer's attitude. The customer's attitude toward the product is significantly affected by both the dimensions of mental imagery (Park & Yoo, 2020). Attitude enhances the behavioral intentions of customers (Rathee & Kumari, 2020). Dimensions of mental imagery, that is, "elaboration and quality," have a significant direct influence on behavioral intention (Yoo & Kim, 2014). Vividness and elaboration dimensions have a significant influence on purchase intention (Gavilan et al., 2014). Self-mental imagery enhances "hedonic and self-conscious emotions" which leads to "impulse purchase" and positive purchase intentions (Lao, 2013). If customers feel that a particular technology provides a clear and quality information which is required during the purchase process, they can immerse and engage more with it. Product visualization with clear and quality images changes the abstract mindset into concrete (Choi & Taylor, 2014). Concrete picture presentation influences mental imagery more than textual information (Wu et al., 2020).

Theoretical and Managerial Implications

The findings provide insight about the mental imagery to retailers as well as researchers to understand the importance of product presentation in the e-tail environment during this COVID-19 pandemic. Results of our study may help to provide empirical evidence to the e-tailer to create better e-tail environment. E-tailers might get help from these findings and frame their strategies accordingly to attract more traffic on their website, increase sales outcomes, and get competitive advantages during and after this pandemic. It also provides theoretical and practical insights to researchers: How virtual try-on technology influences the mental imagery? This study contributes to the literature of marketing to study the mental imagery of customers toward the new developing technologies.

Conclusion

The objective of this study is to empirically examine whether virtual try-on activates the mental imagery by affecting the different dimensions of mental imagery. The results show that virtual try-on technology enhances the mental imagery of customers toward the glasses. All the dimensions of mental imagery have a positive mean value (above 4). Based on the results and discussion, it is concluded that the e-tailers can increase the customer's mental imagery and virtual experiences by adopting new product visualization technology (virtual try-on) during this pandemic because it not only enhances mental imagery but also leads mental imagery to positive customer attitude toward product, technology, and retailer's website. Mental imagery also influences the behavioral intention of customers. Hence, mental imagery plays a crucial role in this online retail environment so the retailers can widen their business and get a competitive advantage.

Few limitations were confronted by the researchers while conducting this study. First, this study is conducted in the Delhi NCR region, so the results may not be

generalized all over India and other countries. Second, while collecting data, the questionnaire was sent to respondents via the internet. No face-to-face interaction was there with the respondents. Third, the study was conducted through the internet survey method; its results might have been different if it was an experiment and conducted in controlled conditions. Future studies can be conducted in other regions with specific product categories and with face-to-face interactions.

Declaration of Conflicting Interests

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of this article.

Note

1. *Revolutionary virtual try-on technology in fashion retail will boost economic recovery.* Retrieved June 21, 2021, from https://inc42.com/resources/revolutionaryvirtual-try-on-technology-vto-in-fashion-retail-will-boost-global-economic-recovery/

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