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RESEARCH ARTICLE

The Effect of Virtual Try-On Technologies on Purchase Intention in Fashion Retailing: The Mediating Role of Perceived Product Fit

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Abstract

The rapid development of online fashion stores has added more challenges to the reality that consumers cannot physically analyse something like a piece of fashionable dress and buy it, especially in a size that fits. One of the biggest factors that prevents purchase intention and causes dissatisfaction and high turnover among consumers is the uncertainty related to the fittings. In turn, fashion retailers have been steadily developing virtual try-on (VTO) technologies as a new tool for assessing online products. However, the empirical findings on the usefulness of virtual try-on technologies in influencing purchase intention remain mixed, which justifies the need for a more focused conceptual framework. This concept paper examines the influence of virtual try-on technologies on purchase intention in online fashion retailing and how perceived product fit mediates this effect. The paper presents a summary of the potential theoretical and empirical sources on the subject and argues that virtual try-on technologies do not directly impact purchase intention; instead, they have an indirect impact, as they enhance consumers' confidence in the garment fit. The perceived product fit concept is theorised as being an important thinking process which minimises the uncertainty of the fit and maximises the confidence in making the decision. The article introduces a well-organised conceptual framework that relates the features of virtual try-on technology and perceived product fit to purchase intention, offering both theoretical and empirical insights and implications for online retailers interested in maximising the purchasing experience.

Keywords: *Consumer Behaviour, Online Fashion Retailing, Perceived Product Fit, Purchase Intention, Virtual Try-On Technology*

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1. INTRODUCTION

The rapid evolution of digital technology has radically transformed the retail world globally, making online shopping one of the primary channels through which consumers can make purchases. The fashion industry is one of the most dynamically emerging industries in the field of e-commerce in this shift due to the increase in the penetration of the internet, the spread of smartphones, and the changing lifestyles of consumers (Batool & Mou, 2023; Chen et al., 2024; Sekri et al., 2024). Some of the best benefits of online retailing to the consumer include convenience, greater product choice, time-saving, and the availability of global brands. However, despite the advantages, clothing is a complex type of product in online markets, as decisions to buy products are closely dependent on experience and sensory perception, which are not easily replicated on the Internet (Aggarwal et al., 2025).

The buying of clothes, rather than standardised or low-involvement items, should be assessed keenly with respect to size, fit, comfort, and appearance. Garment trials are one of the methods used by customers to determine how garments fit their bodies and meet their preferences in a physical retail environment. The online shopping environments, however, merely provide the consumers with the console images, size charts, and textual descriptions that do not necessarily provide accurate and reliable information about the fit (Chrimes et al., 2022; Kim & Forsythe, 2008; Sekri et al., 2024). The perceived risk and uncertainty resulting from this physical distance cause hesitant purchase decisions. Fit issues have consistently been one of the primary causes of cart abandonment and high returns in online fashion retailing, posing significant operational and financial challenges to retailers (Aggarwal et al., 2025; Batool & Mou, 2023; Chen et al., 2024).

To address these issues, virtual try-on technologies have emerged as a new tool that online fashion retailers utilise to enhance online product testing. Virtual try-on (VTO) technologies enable customers to virtually test garments on themselves using augmented reality, 3D visualisation, and avatars based on fitting systems (Batool & Mou, 2023; Chen et al., 2024; Kim & Forsythe, 2008). Technology should bridge the divide between virtual and physical shopping experiences by providing interactive and immersive product presentations. Past research has revealed that virtual try-on systems can potentially generate a greater level of

consumer engagement due to the possibility of providing a greater amount of visual information, higher levels of product knowledge, and a decreased amount of uncertainty regarding clothing purchases (Aggarwal et al., 2025; Chrimes et al., 2022; Sekri et al., 2024).

Even though the utilisation of virtual try-on technologies is gaining increasing prominence, the empirical findings on how the technologies impact purchase intent are inconclusive. Whereas there are researchers that have detected a positive effect on customer confidence and intentions to purchase a product, others report that the effects of virtual try-on technologies are sufficient to relate to the factors of realism and convenience of use, as well as to personal consumer characteristics (Batool & Mou, 2023; Chen et al., 2024; Sekri et al., 2024). Such contradictory findings suggest that the influence of virtual try-on technologies on purchase intention may be indirect, specifically mediated by certain background cognitive judgments. One of the most important reviews is product fit, which is a subjective assessment of a garment by the customer in relation to its projected size, fit, and style (Aggarwal et al., 2025; Chrimes et al., 2022; Sekri et al., 2024).

It has been widely acknowledged that the perceived product fit is one of the most significant elements in the decision-making process for purchasing apparel, especially in an online environment where physical testing of the product is not possible. The perceived fit is perceived as high in connection with reduced perceived risk and high purchase confidence and is perceived as low in connection with increased post-purchase dissatisfaction and low purchase intention (Batool & Mou, 2023; Chrimes et al., 2022; Kim & Forsythe, 2008). Although virtual try-on technologies are directly aimed at enhancing perceived product fit, numerous antecedent studies have viewed perceived fit as an outcome variable, without considering its possible mediating effect between virtual try-on use and purchase intention. The resulting conceptual gap, in its turn, disrupts the holistic perception of the role of virtual try-on technologies on consumer decision-making processes, particularly within the context of booming market environments where online fashion stores are gaining traction (Aggarwal et al., 2025).

1.1. Problem Statement

The challenge of providing online fashion retailing with the inability to consistently evaluate the fit of an apparel item on a customer's body in an online environment remains one of the most significant challenges within the field of online fashion retailing, creating a high level of uncertainty and reluctance to purchase products. Such uncertainties also strongly correlate with dissatisfaction and expensive product recalls, posing a significant operational and marketing challenge to fashion retailers. Even though virtual try-on systems represent a technological breakthrough that enables users to visualise the appearance of garments and assess products, most VTO systems still do not fully replicate the physical try-on experience, leading consumers to doubt their accuracy and usefulness. This is why retailers invest in VTO technology; however, the degree to which it consistently enhances online purchase-related results remains an unresolved question in both research and practice (Batool & Mou, 2023; Chen et al., 2024).

At the research level, the available literature demonstrates that interactive and immersive product presentation tools can influence consumer reactions; however, the results regarding the direct impact of VTO on purchase intention are not always consistent across contexts, design, and user groups. What is more important, numerous studies consider VTO as a blanket stimulus and fail to explain how it is converted into a purchase intention as a particular psychological process that the consumer will view as essential to apparel shopping, i.e., the perception of product fit. The existing literature emphasises that the perception of product fit is core to the process of assessing apparel and has a close relationship with reducing risk and trust in online purchasing judgments. Therefore, the actual value of VTO can be determined by whether it alters perceived fit, rather than technological novelty itself. Thus, the major research question is that the connection between VTO and purchase intention in online fashion retailing has not been described well through one mediating pathway yet, and the mediating effect of perceived product fit has not been studied and specified in most VTO models (Chrimes et al., 2022; Kim & Forsythe, 2008; Sekri et al., 2024).

1.2. Purpose of the Study

Fashion retailers have progressively implemented virtual try-on technologies as a competitive response to the persistent challenges faced by consumers in the online shopping context, aiming to determine the fit of apparel. Previous research has shown that these technologies improve visualisation, interactivity, and user engagement, thereby reducing uncertainty about size and appearance (Chen et al., 2024; Kim & Forsythe, 2008; Sekri et al., 2024). However, the available research still presents inconclusive and conflicting results regarding the strength of the effect of virtual try-on technologies on consumer purchase intentions. Much of the prior literature has focused on technology acceptance, perceived utility, or hedonic value, but little has been done on the cognitive appraisal that converts technology use into concrete behavioural intention (Aggarwal et al., 2025; Batool & Mou, 2023; Chrimes et al., 2022).

One of the gaps in the literature that requires attention is the suboptimal analysis of perceived product fit as a mediating variable between virtual try-on technologies and purchase intention. The perceived product fit is generally recognised as a critical factor influencing online apparel buying behaviour, as it directly affects the perceived risk and purchase confidence (Chrimes et al., 2022; Kim & Forsythe, 2008; Sekri et al., 2024). Virtual try-on systems are specifically designed to increase consumer confidence in the fit assessment; therefore, overlooking this mediating effect limits a comprehensive understanding of the operational effect of these systems. Based on this, this paper aims to theorise the impact of virtual try-on technologies on purchase intention in online fashion retailing, including the role of perceived product fit in the mediation, and also to provide a systematic background of future empirical research, particularly in the context of emerging markets (Aggarwal et al., 2025; Batool & Mou, 2023; Chen et al., 2024).

2. DESIGN AND METHODOLOGY

The current study will employ a conceptual research design based on a comprehensive review and synthesis of the existing academic literature related to virtual try-on technologies, perceived product fit, and purchase intention in online fashion retailing. This conceptual framework is justified by the fact that the goal is to bring together different empirical findings

and theoretical perspectives to explain a coherent causal pathway where VTO technologies can affect consumer decision-making, but not to put hypotheses to the test (Batool & Mou, 2023; Chen et al., 2024; Sekri et al., 2024). Peer-reviewed journal articles, conference proceedings, and systematic reviews included in authoritative databases were reviewed as sources to ensure methodological rigour and conceptual relevance. Special attention was paid to the studies that focus on the consideration of fit, perceived risk, and behavioural intention by consumers in online apparel settings since perceived product fit is a central mechanism that connects VTO usage and purchasing intention (Aggarwal et al., 2025; Chrimes et al., 2022; Kim & Forsythe, 2008). The synthesis of these studies creates a conceptual framework that can guide future empirical studies within online fashion retail settings, as presented in the present contribution.

3. LITERATURE REVIEW

3.1. Virtual Try-On Technology

The problem of online shopping, being a digital environment where people cannot experience physical contact with the product, has become increasingly relevant to the sphere of virtual try-on technologies. VTO systems in fashion retailing aim to replicate aspects of the in-store try-on experience, including augmented reality, three-dimensional models, and avatars (Chen et al., 2024; Kim & Forsythe, 2008; Sekri et al., 2024). Purchase decisions in the fashion retailing industry are highly dependent on experiential evaluation, and VTO systems are trying to recreate this experience. These technologies enable consumers to visualise clothes on virtual models of their bodies, explore other sizes or styles, and interact with products in a more engaging way than with outdated static images or size charts.

Empirical studies indicate that VTO technologies enjoy both utilitarian and experiential advantages to online shoppers. Utilitarians would view them as enhancing the quality of information by incorporating more visual data to facilitate product assessment and reduce uncertainty that can be encountered when purchasing clothes (Aggarwal et al., 2025; Batool & Mou, 2023; Chrimes et al., 2022). VTO is also experiential, which will add interactivity and fun to it, and this may positively affect consumer attitudes towards online fashion

platforms. However, empirical evidence also shows that not all consumers react similarly to VTO technologies. Some users doubt the quality and realism of virtual representations, namely, the fit of garments and the correspondence of body shapes (Chen et al., 2024; Sekri et al., 2024). These are the ambivalent perceptions, which support the fact that the success of VTO technologies is not merely a question of their availability, but also a question of how they help consumers cognitively examine the information they have in the purchase decision-making process.

3.2. Perceived Product Fit

Perceived product fit refers to the subjective evaluation of how well a garment is expected to fit the body shape, ensuring it is comfortable and possesses the specified aesthetic value that the consumer desires. Perceived fit is a key variable that affects consumer behaviour in the context of online fashion retailing since one cannot physically test the product before purchasing (Aggarwal et al., 2025; Chrimes et al., 2022; Sekri et al., 2024). In cases where consumers have high expectations of a favourable fit, they express reduced perceived risk, increased confidence, and a higher propensity to buy. On the other hand, uncertainty about fit tends to lead to indecisiveness, cart abandonment, and a high probability of product returns.

The current body of literature has continued to emphasise the perceived fit of the product as a central source of satisfaction and behavioural intention in online apparel purchase. There is empirical evidence that the issue of fit is one of the most mentioned causes of consumer dissatisfaction and return behaviour in fashion e-commerce (Batool & Mou, 2023; Chen et al., 2024; Chrimes et al., 2022). Virtual try-on technologies are directly designed to improve perceived product fit by allowing consumers to see clothes on digital avatars which simulate their anthropometric features. Research has shown that exposure to VTO tools can increase consumer confidence in fit assessment compared to traditional online displays, although with differences in system accuracy and consumer variation (Kim & Forsythe, 2008; Sekri et al., 2024). Although it is important, perceived product fit has often been considered an outcome variable rather than a key explanatory construct in the VTO literature.

3.3. Purchase Intention in Online Fashion Retailing

Purchase intention is used to indicate the extent to which consumers are likely to purchase a product through an online medium after having assessed the information at their disposal. In online fashion retailing, purchase intention is determined by a complex interdependence of factors, including perceived risk, trust, information quality, and confidence in product evaluation (Chrimes et al., 2022; Kim & Forsythe, 2008; Sekri et al., 2024). The purchase of apparel is usually a high-involvement product, and purchase intention is especially vulnerable to uncertainty about fit, size, and appearance.

Empirical studies indicate that customers are more likely to form a stronger purchase intention when they have confidence in terms of the fit of clothing to their physique. Research on virtual try-on technologies suggests that these options can supplement purchase intention by increasing product understanding and reducing doubts about the product that arise in an online context (Aggarwal et al., 2025; Batool & Mou, 2023; Chen et al., 2024). Nonetheless, researchers are increasingly arguing that technological features alone do not have a direct impact on purchase intention. Rather, VTO technologies influence purchase intention through the indirect effect of influencing cognitive judgments, including perceived fit and perceived risk. This perspective can be explained by general consumer behaviour models that emphasise the fact that behavioural intentions are formed based on evaluative beliefs, rather than exposure to technology (Chrimes et al., 2022; Sekri et al., 2024).

3.4. Effect of Virtual Try-On Technologies on Purchase Intention

The effect of virtual try-on technologies on purchase intention is an issue that has garnered growing academic interest in the literature on online fashion retailing, as purchase intention is one of the most critical behavioural outcomes in online shopping. Purchase intention refers to the willingness and preparedness of a consumer to purchase a product based on the perceived evaluation of available information; in apparel retail, the purchase intention is highly adjusted by the perceived uncertainty and confidence towards product evaluation (Chrimes et al., 2022; Kim & Forsythe, 2008; Sekri et al., 2024). The VTO technologies are designed to eliminate this vagueness, enabling consumers to view garments in a more realistic and interactive manner, thereby allowing them to make more confident purchasing decisions.

Empirical studies have shown that consumers exposed to VTO technologies often report higher purchase intentions compared to those who use traditional online product displays only. It has been shown that VTO systems improve the understanding of product features among consumers and allow them to mentally simulate the wear of the garments, which, in turn, has a beneficial effect on behavioural intention (Aggarwal et al., 2025; Batool & Mou, 2023; Chen et al., 2024). However, the literature also simultaneously points out that the correlation between VTO use and purchase intention is not always direct. A portion of the literature suggests that although VTO can stimulate engagement and enjoyment, it does not always result in a greater purchase intention unless the customer believes that the technology is trustworthy and informative regarding product fit (Chrimes et al., 2022; Sekri et al., 2024).

The findings suggest that virtual try-on technologies have a significant impact on purchase intention, contingent upon cognitive evaluation by consumers, rather than technological exposure alone. Scientists claim that VTO systems play a significant role in influencing the purchase intention through the mediation of intermediate beliefs such as perceived product fit and reduced perceived risk, which subsequently increase behavioural intention (Batool & Mou, 2023; Chen et al., 2024; Kim & Forsythe, 2008). Along this line, to gain a finer insight into how virtual try-on technologies influence purchase intention, it is necessary to examine the psychological process behind the influence of these technologies on consumer decision-making, rather than presuming a direct relationship.

3.5. Mediating Role of Perceived Product Fit

The intervening effect of perceived product fit provides a crucial theoretical construct for explaining the impact of virtual try-on technologies on purchase intention in the context of online fashion retailing. Although VTO systems can lead to a better level of visualisation and interactivity, their effect on consumer behaviour is determined by their ability to make consumers more confident about the fit of garments (Batool & Mou, 2023; Chen et al., 2024; Sekri et al., 2024). When VTO technologies are applied in a situation where perceived product fit is increased, consumers tend to display lower perceived risk and higher perceived confidence, which in turn favours purchase intention. Conversely, in the case of perceived fit

uncertainty, the technology may not affect behavioural outcomes even with an attractive user experience.

Although the importance of fit confidence in online clothing shopping has been established in earlier studies, there is a paucity of empirical studies that explicitly investigate the role of perceived product fit as a mediating variable between VTO utilisation and purchase intention. Current literature largely focuses on direct relationships or considers perceived fit as an outcome variable, thereby ignoring its explanatory power in the decision-making process (Aggarwal et al., 2025; Chrimes et al., 2022; Kim & Forsythe, 2008). The current research provides a more detailed explanation of how VTO technologies are transformed into behavioural intention by placing perceived product fit in the centre. This methodological position is also quite consistent with the practical problem of the uncertainty of fit in online fashion retail and offers a more robust conceptual basis for further empirical study.

4. DISCUSSION

The current concept paper discussion centres on the impact of virtual try-on technologies on consumer decision-making in the online fashion retail sphere, specifically the formation of product perception and the intention to purchase. The reviewed literature has shown that virtual try-on technologies have been adopted primarily as a response to uncertainty related to fit, which remains one of the most significant obstacles in the online shopping process for apparel. Although online fashion sales are more convenient and offer increased access, they simultaneously increase the perceived risk due to the inability to physically evaluate garments (Chrimes et al., 2022). Researchers also argue that the application of technology in online retailing should focus on addressing fundamental decision-making challenges, rather than just enhancing interface design (Chen et al., 2024). Virtual try-on technologies are, in this sense, theorised as decision-support systems but not persuasive tools, which fit into more general models of consumer behaviour which focus on reducing risk and building confidence (Batool & Mou, 2023).

One of the key findings made based on the literature is that the correlation between virtual try-on technologies and purchase intention is not that direct. Several studies suggest that,

despite often being perceived by consumers as innovative and engaging, positive experiences with virtual try-on features do not always lead to increased purchase intention (Sekri et al., 2024). This fact is supported by evidence that consumers can have fun using virtual try-on tools, while simultaneously questioning the reliability of the technology to provide accurate information about garment fit (Aggarwal et al., 2025). Such results suggest that virtual try-on technologies indirectly affect behavioural outcomes by influencing cognitive evaluations, rather than the technological novelty itself, which supports arguments made in the area of technology-mediated shopping studies (Chen et al., 2024).

A major construct that accounts for this indirect effect is perceived product fit. Perceived fit is among the most potent predictors of online apparel purchase behaviour, as it directly influences perceived risk, perceived confidence, and perceived satisfaction, as reported in the literature (Chrimes et al., 2022). Empirical studies, which focus on online fit judgment, indicate that clients are highly reliant on visual and contextual data to form expectations about how garments will fit their bodies (Sekri et al., 2024). Virtual try-on technologies enable this through the mechanism of mental simulation, allowing consumers to imagine the physical differences of using a garment. Nevertheless, the validity of this simulation will be determined by the perceived validity of the virtual representation, which differs depending on technological designs and user expectations (Batool & Mou, 2023).

The mediating role of perceived product fit provides a further consistent theoretical explanation of how virtual try-on technologies are converted into purchase intention. The literature does not presuppose that virtual try-on technologies have a direct causal effect on perceived fit, but rather that this effect is mediated, where perceived fit contributes to purchase intention (Chen et al., 2024). Such interpretation aligns with current consumer decision-making theories, which suggest that behavioural intention is gained because of evaluative beliefs, rather than being directly influenced by exposure to stimuli. There are also empirical findings that show that when virtual try-on systems fail to affect the perceived fit, their impact on purchase intention is not substantial, even in cases where the engagement level is high (Aggarwal et al., 2025). It is thus a pointer that the perceived product fit as an explanatory mechanism should be studied, but not an incidental factor.

Another significant point raised in the discussion is the differences in consumer reactions to virtual try-on technologies. According to previous studies, individual differences, including prior online shopping experience, body image awareness, and expectations of technological realism, have a significant impact on consumer perception and utilisation of virtual try-on systems (Sekri et al., 2024). To a certain group of consumers, virtual try-on technologies are significantly less uncertain and raise the confidence of purchasing, but others are not convinced that the technology is accurate. Research examining technology adoption in fashion situations suggests that this kind of scepticism can undermine the technology's ability to shape behavioural intention unless it is reinforced by other fit-related information (Batool & Mou, 2023). This inconsistency suggests that virtual try-on technologies cannot be considered a universal solution, but rather a component of an extended fit-communication strategy (Chrimes et al., 2022).

Within the discussions, it is suggested that, as a manager, the functional accuracy and reliability of the virtual try-on technologies utilised by the fashion retailers must be valued more than the entertainment aspect. It has been discovered that technologies perceived as aesthetically appealing but inaccurate may have no impact on perceived risk reduction, thereby limiting their influence on the intention to purchase (Chen et al., 2024). It is prudent to recommend that retailers use virtual try-on in conjunction with other cues, such as size recommendations, customer reviews, and model diversity, to enhance the perception of product fit (Aggarwal et al., 2025). This integration is consistent with the fact that consumers utilise various sources of information during the process of high-involvement apparel purchasing (Sekri et al., 2024).

Comprehensively, this discussion has revealed that virtual try-on technologies in online fashion retailing are useful in influencing purchase intention because they can increase perceived product fit. Not only does their performance highly depend on the novelty of the technology they feature, but they can also reduce the degree of uncertainty associated with fitting them, thereby enhancing consumer trust. A mediation concept of perceived product fit as a mediator offers a broader explanation of consumer behaviour and has practical implications for both academic studies and retailing. In respect of this reading, the summary table below summarises the main ideas as discussed by systematically defining the main

constructs, their corresponding sub-variables, and the operationalisation of the measurement indicators as conducted by previous research. Table 1 presents the conceptual arguments of the discussion in a systematic framework, illustrating how specific features of virtual try-on technologies contribute to perceived product fit and, consequently, to purchase intention. The table connects technological features, as well as fit-related measures and behavioural consequences, to form an integrative picture of the suggested relationships and serves as a clear guide for further empirical research.

Table 1
Conceptual framework linking virtual try-on features, perceived product fit, and purchase intention

Concept	Sub-Variables	Measurement / Indicators	Source
Virtual try-on technology	Perceived usefulness	Usefulness in evaluating apparel online	Kim & Forsythe (2008)
		Helps understand product appearance	Sekri et al. (2024)
		Improves decision-making confidence	Batool & Mou (2023)
	Perceived ease of use	Ease of interacting with VTO features	Kim & Forsythe (2008)
		Simplicity of navigation	Chen et al. (2024)
		Effort required to use VTO	Batool & Mou (2023)
	Interactivity	Degree of user control	Chrimes et al. (2022)
		Ability to manipulate product view	Chen et al. (2024)
		Engagement with VTO features	Sekri et al. (2024)
	Visual realism	Accuracy of garment visualisation	Aggarwal et al. (2025)
		Body–garment alignment realism	Batool & Mou (2023)
		Representation of size and shape	Chen et al. (2024)
Perceived product fit	Size accuracy	Perceived correctness of size	Chrimes et al. (2022)
		Match between body and garment	Sekri et al. (2024)
		Confidence in size selection	Aggarwal et al. (2025)
	Comfort expectation	Expected wearing comfort	Chrimes et al. (2022)
		Ease of movement perception	Kim & Forsythe (2008)
		Physical feel anticipation	Batool & Mou (2023)
	Appearance evaluation	Expected look on own body	Sekri et al. (2024)
		Style suitability	Chen et al. (2024)
		Aesthetic satisfaction	Chrimes et al. (2022)
	Fit confidence	Confidence in fit outcome	Aggarwal et al. (2025)
		Reduced fit-related uncertainty	Batool & Mou (2023)
		Trust in fit evaluation	Sekri et al. (2024)

Concept	Sub-Variables	Measurement / Indicators	Source
Purchase intention	Willingness to purchase	Likelihood of buying online	Kim & Forsythe (2008)
		Intention to complete purchase	Chrimes et al. (2022)
		Readiness to buy	Sekri et al. (2024)
	Purchase confidence	Confidence in purchase decision	Aggarwal et al. (2025)
		Reduced hesitation	Batool & Mou (2023)
		Certainty before checkout	Chen et al. (2024)
	Future purchase intention	Intention to buy similar products	Chrimes et al. (2022)
		Likelihood of repeat purchase	Sekri et al. (2024)
		Continued use of VTO-enabled platforms	Batool & Mou (2023)
Mediating variable: Perceived product fit	Risk reduction	Lower perceived fit risk	Sekri et al. (2024)
		Reduced return intention	Batool & Mou (2023)
		Increased certainty	Aggarwal et al. (2025)
	Decision confidence	Confidence in size and style choice	Chrimes et al. (2022)
		Trust in virtual evaluation	Kim & Forsythe (2008)
		Assurance before purchase	Chen et al. (2024)

Source: Compiled by the authors based on the reviewed literature

5. CONCLUSION AND FUTURE RESEARCH DIRECTIONS

This concept paper explores the purpose of virtual try-on technologies in influencing purchase intention in online fashion retailing, with a specific focus on the intervening role of perceived product fit. As the discussion shows, despite virtual try-on technologies gaining popularity as a new digital retail tool, their impact on consumer behaviour cannot be attributed solely to technological novelty. Instead, their usefulness is determined by the possibility of decreasing the uncertainty of the fit and increasing the degree of confidence of consumers when viewing online clothes (Batool & Mou, 2023; Chen et al., 2024; Sekri et al., 2024). Previous studies have also shown that perceived product fit is a crucial factor influencing the decision to buy apparel online, as uncertainty about size, comfort, and appearance continues to deter consumers from making purchases (Aggarwal et al., 2025; Chrimes et al., 2022). The present research, by placing perceived product fit as a mediating process, provides a more detailed background of the transformation of virtual try-on technologies into behavioural consequences.

The conceptual synthesis presented in this paper is relevant to the existing literature in that it incorporates technological qualities, cognitive assessments, and behavioural intentions into a single explanatory model. In online fashion retailing, the consumer decision-making process can be simplified because most previous research has concentrated on the direct relationships

between the use of technology and purchase intention (Kim & Forsythe, 2008; Sekri et al., 2024). On the other hand, the current study has established the importance of intermediary beliefs, namely, perceived product fit, in shaping the intention to behave. In terms of management, it can be assumed that the accuracy, realism, and credibility of virtual try-on systems are the highest priorities for fashion retailers, as they directly affect the perceived fit and purchase confidence (Batool & Mou, 2023; Chen et al., 2024). Moreover, there is a higher likelihood that investments in virtual try-on technologies will yield positive outcomes if they are incorporated into a broader range of fit-related communication strategies.

Although it makes significant contributions, this study is conceptual in nature and presents numerous research possibilities for the future. Quantitative studies should be conducted to test the proposed relationships and mediating effects in various online fashion retail contexts; however, this is only possible with the help of empirical studies (Chen et al., 2024; Chrimes et al., 2022). The online shopping experience, technological preparedness, and the attitude of consumers towards body images, which have been revealed to alter responses toward virtual try-on technologies, are also potential moderating variables that one can consider in future research (Aggarwal et al., 2025; Sekri et al., 2024). Moreover, the proposed framework would be more generalizable with the help of cross-cultural and new market research, as confidence in digital assessment tools may vary under different conditions (Batool & Mou, 2023).

Additionally, the framework can be extended by future studies to include post-purchase variables, such as satisfaction, return behaviour, and long-term loyalty, to capture the comprehensive effects of virtual try-on technologies on consumer-retailer relationships (Chen et al., 2024; Sekri et al., 2024). By addressing these directions, research studies can develop the conceptual base presented in this study and enhance knowledge of technology-enabled consumer behaviour in online fashion retailing.

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