

The Influence of Perceived Decision Difficulty on Online Cart Abandonment in The Apparel Industry

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Abstract

Background: Cart abandonment occurs when online shoppers add items to their virtual carts but leave the website or app before completing the purchase. This issue is particularly prevalent in the apparel industry, which has a cart abandonment rate of 77%, higher than the global average of 69.99%. This high rate poses a significant challenge to maximizing sales and customer retention, despite the industry's rapid growth.

Objectives: This study aims to explore the factors contributing to the high rate of cart abandonment in the online apparel industry, with a specific focus on understanding the role of perceived decision difficulty in this phenomenon.

Novelty: While previous research has addressed various aspects of online shopping behavior, this study uniquely examines how perceived decision difficulty, influenced by product attributes, consumer knowledge, maximization behavior, and physical intangibility, contributes to cart abandonment in the apparel sector.

Research Methodology / Design: This quantitative study surveyed over 200 recent online apparel buyers using a purposive sampling approach. Data were collected via a structured questionnaire and analyzed using Structural Equation Modeling (SEM) to explore relationships among variables.

Findings: The study found that while product attributes and consumer knowledge enhance decision-making, they do not significantly reduce perceived decision difficulty due to the complexity and cognitive effort required. Maximization behavior increases choice conflicts but does not directly impact decision difficulty. Physical intangibility, or the inability to examine apparel in person, exacerbates decision difficulty and increases uncertainty. High perceived decision difficulty, driven by choice conflicts and physical intangibility, is a significant factor contributing to cart abandonment.

Implication: Enhancing product information and introducing decision support tools like virtual fitting rooms could reduce decision difficulty and lower cart abandonment rates.

Keywords:

Cart abandonment;
Apparel industry;
Perceive decision
difficulty

JEL Classifications:

D12, L81, L98, M31

A. Introduction

E-commerce, the buying and selling of goods and services over the internet, has fundamentally reshaped global commerce and influenced industries ranging from retail to entertainment (Turban et al., 2015). Recent years have witnessed e-commerce's rapid growth, driven by digital innovations such as mobile commerce and social media integration (Wang et al., 2015; Zhang et al., 2022). These changes have transformed traditional retail dynamics, with consumers now enjoying the convenience of shopping online, comparing prices, and browsing vast product selections from anywhere, at any time (Sinha et al., 2019).

Despite its advantages, online shopping presents unique challenges, particularly in the apparel industry, where the lack of physical inspection contributes to consumer hesitation. One prominent issue in this sector is cart abandonment, where customers add items to their shopping cart but do not complete the purchase. With cart abandonment rates as high as 77% in the global fashion industry, this trend poses a significant barrier to e-commerce profitability (Dynamic Yield, 2023). Previous studies have attributed these high abandonment rates to the intangibility of online products, choice overload, and lack of product knowledge (Jiang & Benbasat, 2007; Iyengar & Kamenica, 2010).

Indonesia's e-commerce landscape, particularly in the apparel sector, provides a unique context for studying these challenges. Supported by a tech-savvy population and rising internet penetration, Indonesia's e-commerce market reached a gross merchandise value (GMV) of \$74 billion in 2020, with projections to reach \$234 billion by 2025 (Google, Temasek, & Bain & Company, 2020). The apparel segment, with its projected revenue of \$22.66 billion in 2024, has become one of the fastest-growing online categories in the country (Statista, 2024). However, the growing popularity of online shopping has heightened cart abandonment concerns in the Indonesian apparel market, where consumer behavior may differ significantly from Western markets due to unique cultural, economic, and technological factors.

This study distinguishes itself from prior research by focusing on the specific consumer behaviors driving cart abandonment within Indonesia's online apparel market. While much of the existing research on cart abandonment and online consumer behavior is based on Western markets, relatively little is known about these dynamics in emerging markets like Indonesia, where factors such as local shopping preferences, socioeconomic factors, and evolving digital infrastructure influence consumer decisions in unique ways. This study introduces a conceptual model tailored to the Indonesian e-commerce landscape, analyzing how product attributes, consumer knowledge, maximization behavior, choice conflicts, and decision difficulty impact cart abandonment. By investigating these variables within Indonesia's distinct cultural and market context, this research provides a novel framework for understanding and addressing high cart abandonment rates in emerging economies.

Furthermore, this study incorporates a comprehensive examination of virtual product interactions and digital decision aids, such as detailed product descriptions, customer reviews, and interactive visuals, to explore their potential in mitigating cart abandonment. Unlike previous studies, which have largely focused on individual factors, this research offers an integrated perspective on how various elements interact to shape online apparel shopping decisions. The research provides original insights into consumer behavior in the Indonesian online apparel market and proposes strategic interventions for reducing cart abandonment. By focusing on an emerging market context, the findings of this study contribute valuable knowledge to the global understanding of e-commerce, with implications for both academic research and industry practices.

B. Literature Review

B.1. Theoretical Framework

The Consumer Decision-Making Theory

Consumer decision-making theory encompasses various models that elucidate how consumers navigate purchasing decisions, shedding light on cognitive, emotional, and social factors influencing behavior. The Theory of Planned Behavior (TPB), proposed by Ajzen (1991), posits that consumer intentions are shaped by attitudes toward the behavior, subjective norms, and perceived behavioral control. In the context of online shopping, positive attitudes towards e-commerce, social influences, and perceived transaction security significantly influence consumer intentions to shop online. The Elaboration Likelihood Model (ELM), outlined by Petty and Cacioppo (1986), distinguishes between central and peripheral routes of information processing. Online consumers often use peripheral cues like website design and reviews due to the volume of available information. Expectancy-Disconfirmation Theory, as described by Oliver (1980), highlights how consumer satisfaction hinges on the alignment between expected and actual product performance in online shopping contexts.

Product Attributes

Product attributes are pivotal in consumer decision-making, encompassing intrinsic and extrinsic features that define a product's value. According to Kotler and Keller (2016), intrinsic attributes such as design, functionality, durability, and materials directly affect product performance and user experience. Extrinsic attributes like brand name, price, packaging, and country of origin influence consumer perceptions and decision-making processes (Zeithaml, 1988). These attributes serve as cues for consumers to assess product quality and value, reducing uncertainty and perceived risk (Wang & Hazen, 2016). Product differentiation through unique attributes enhances competitive advantage and influences consumer preferences across various categories, including apparel.

Consumer Knowledge

Consumer knowledge plays a crucial role in shaping consumer behavior and decision-making processes. Defined by Moorman et al. (2004), consumer knowledge refers to the information and understanding consumers possess about products, brands, and markets. Objective knowledge involves measurable facts acquired through education or information search, influencing confident decision-making and reducing cognitive dissonance (Flynn & Goldsmith, 1999). Subjective knowledge reflects personal perceptions of product familiarity and impacts consumer confidence in decision-making. Experience-based knowledge, derived from direct interactions, enhances understanding of product performance and informs future purchasing decisions (Hoch & Deighton, 1989). In the digital era, access to online reviews, social media, and interactive technologies enriches consumer knowledge, facilitating informed choices in complex markets like apparel.

Maximization Behavior

Maximization behavior describes consumers who rigorously seek the best possible option, scrutinizing numerous alternatives to satisfy high standards. Introduced by Schwartz et al. (2002), maximizers invest substantial time and effort in decision-making, comparing brands, styles, and prices extensively. This behavior, influenced by advertising and product features that promise exceptional quality, often leads to decision fatigue and heightened anxiety (Dar-Nimrod et al., 2018; Lai, 2019). In the apparel industry, maximizers encounter choice overload due to the abundance of options, amplifying perceived decision difficulty and potential post-purchase regret (Kim & Johnson, 2013; Huang & Benyoucef, 2020). Their exhaustive search process contrasts with satisficers, who prioritize satisfactory choices over exhaustive optimization, resulting in more efficient decision-making experiences.

Choice Conflicts

Choice overload, extensively studied in decision-making research, refers to the cognitive burden and subsequent decision difficulty individuals face when presented with an overwhelming number of options (Iyengar & Lepper, 2000). This phenomenon is exacerbated when decisions are complex, options are similar, and individuals are maximizers who seek the best possible outcome (Schwartz et al., 2013). Maximizers, by their nature, intensify choice overload due to their exhaustive search for optimal choices (Dar-Nimrod et al., 2018). The stress and anxiety induced by choice overload can lead to decision paralysis and reduced satisfaction, even if the chosen option is objectively good (Iyengar & Kamenica, 2010).

Physical Intangibility

Physical intangibility in consumer behavior refers to the inability to physically evaluate a product before purchase, particularly significant in e-commerce where direct interaction with products is impossible (Jiang & Benbasat, 2007). This inability creates uncertainty and perceived risk among consumers, especially in assessing attributes crucial to apparel like fabric quality and fit. The absence of tactile feedback and sensory experience hampers consumer confidence in online purchases (Kim & Lennon, 2013). Trust in the product suffers when consumers perceive high risk due to physical intangibility, impacting their purchase intentions and overall satisfaction (Kim & Peterson, 2017). Strategies such as detailed product descriptions, high-quality images, and user-generated content mitigate these effects by providing additional context and reassurance (Park & Stoel, 2005).

Perceived Decision Difficulty

Perceived decision difficulty reflects the cognitive and emotional strain consumers experience when making choices, exacerbated in online shopping environments by factors like choice overload and lack of physical interaction (Chernev, Böckenholt, & Goodman, 2015). The internet's vast product assortment increases cognitive effort and decision complexity, leading to decision fatigue and potential decision avoidance behaviors like cart abandonment (Scheibehenne, Greifeneder, & Todd, 2010). This difficulty is compounded in apparel purchases where fit, style, and material quality are critical but challenging to assess online (Jiang & Benbasat, 2007). Addressing these challenges through simplified decision aids and enhanced product information can alleviate decision difficulty and improve purchase completion rates (Häubl & Trifts, 2000).

Cart Abandonment

Cart abandonment is a prevalent issue in online retail, occurring when consumers add items to their shopping carts but fail to complete the purchase (Baymard Institute, 2020). It stems from various factors, including perceived decision difficulty influenced by choice overload and physical intangibility. High cognitive load and uncertainty prompt consumers to postpone or abandon purchases, reflecting dissatisfaction with the decision-making process (Tversky & Shafir, 1992). Retailers can mitigate cart abandonment by addressing these factors through improved website design, personalized recommendations, and virtual tools that enhance decision-making confidence and reduce the complexity of online shopping experiences (Häubl & Trifts, 2000).

B.2. Hypothesis Development

Hypothesis 1: Product attributes significantly influence consumer knowledge in online apparel shopping.

Hypothesis 2: Product attributes significantly influence perceived decision difficulty in online apparel shopping.

Hypothesis 3: Consumer knowledge significantly influences perceived decision difficulty in online apparel shopping.

Hypothesis 4: Maximization behavior significantly influences choice conflicts in online apparel shopping.

Hypothesis 5: Maximization behavior significantly influences perceived decision difficulty in online apparel shopping.

Hypothesis 6: Choice conflicts significantly influence perceived decision difficulty in online apparel shopping.

Hypothesis 7: Physical intangibility significantly influences perceived decision difficulty in online apparel shopping.

Hypothesis 8: Perceived decision difficulty significantly influences cart abandonment in online apparel shopping.

B.3. Research Framework

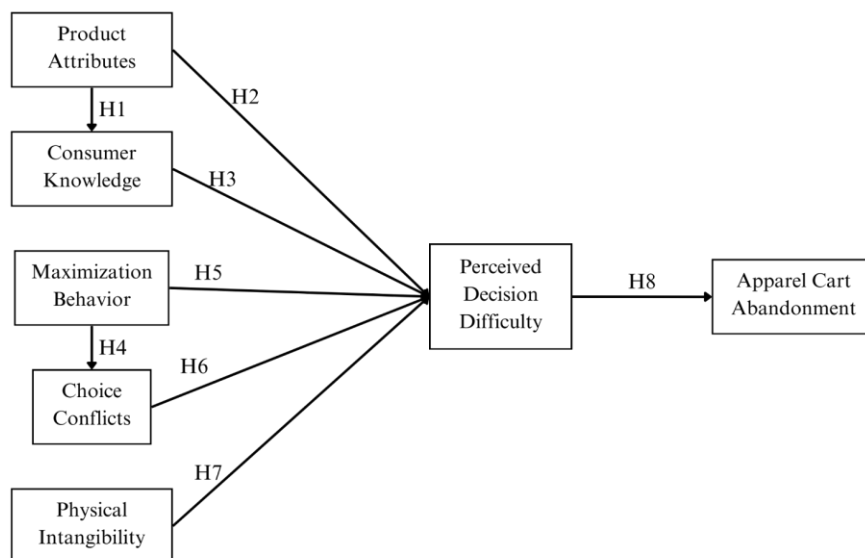


Figure 1. Conceptual Framework

C. Research Methodology

The research employs a deductive approach, beginning with a comprehensive literature review to identify key variables and theories concerning consumer decision-making and online shopping behavior (Bryman, 2016). The conceptual framework hypothesizes relationships among detailed product attributes, consumer knowledge, maximization tendencies, choice conflicts, perceived decision difficulty, and cart abandonment in the apparel industry (Ajzen, 1991; Kukar-Kinney & Close, 2010). A structured questionnaire, validated through pilot testing for reliability and validity (Creswell, 2014), is utilized to gather data from a diverse sample of online apparel shoppers. Statistical techniques such as Structural Equation Modeling (SEM) are then applied to analyze the data, examining both direct and indirect effects to validate or challenge existing theories (Sarkar et al., 2022).

This quantitative approach ensures a methodical analysis of observed occurrences, employing statistical, mathematical, or computational methods to rigorously test hypotheses (Creswell, 2014). The study targets online consumers who have purchased apparel within the past six months, ensuring relevance and recent experience with online shopping environments (U. Seharan, 2006). The data collection instrument was a structured questionnaire, distributed via Google Forms for ease of access and convenience for respondents. This method facilitated wide distribution and response management. Of the 200 responses collected, all were valid and used in the final analysis, as the digital distribution minimized data entry errors and ensured complete responses for each questionnaire item.

Table 1. Quantitative Questionnaire Design

Variables		Measures	Sources
Product Attributes	PA01	The detailed product descriptions on the online apparel store increase my knowledge about the product.	Park, H. Y., & Chang, S. R. (2022)
	PA02	The price of the product affects my knowledge about the product's value.	
	PA03	The quality of the product images on the online apparel store helps me understand the product better.	
Consumer Knowledge	CK01	The more I know about a product, the easier it is for me to make a decision.	Muster, R. F. (2016)
	CK02	I find it easier to make a decision when I have more information about the product.	
	CK03	I feel confident in my knowledge about the product.	

Variables		Measures	Sources
Maximization Behavior	MB01	I often find it difficult to shop from a large variety of options.	Muster, R. F. (2016)
	MB02	I feel overwhelmed when there are too many choices available.	
	MB03	I experience conflict when I have to choose from many options.	
Choice Conflicts	CC01	The more options I have, the harder it is for me to make a decision.	Muster, R. F. (2016)
	CC02	I find it difficult to make a decision when there are too many choices.	
	CC03	I feel stressed when I have to make a choice from many options.	
Physical Intangibility	PI01	The lack of physical interaction with a product makes it harder for me to evaluate its quality.	Laroche, M., et. al (2010)
	PI02	I find it challenging to decide on products that I cannot physically examine.	
	PI03	Not being able to touch or try a product reduces my confidence in buying it.	
Perceive Decision Difficulty	PD01	I often leave items in my online shopping cart without purchasing because I can't decide.	Muster, R. F. (2016)
	PD02	The difficulty of making a decision often leads me to abandon my shopping cart.	
	PD03	I abandon my shopping cart more often when I find it hard to make a decision.	
Cart Abandonment	CA01	I tend to leave things in my online shopping cart instead of buying them.	Sondhi (2017), Hughes (2019)
	CA02	I often close the shopping cart web page or application before purchasing an item.	
	CA03	I will put an item in the shopping cart, but I will not buy it at the same time.	
	CA04	When I buy goods in the shopping cart, I often hesitate.	

Note: The scales are measured on a 5-point Likert-scale (strongly disagree to strongly agree)

D. Result & Discussion

D.1. Result

The reliability of the indicators was confirmed through outer loading values, with all indicators showing values above 0.6, which is considered acceptable (Hulland, 1999). The internal consistency of the constructs was assessed using composite reliability, where all variables exceeded the 0.7 threshold, indicating high reliability (Hair et al., 2017). The convergent validity was also confirmed, with all variables demonstrating Average Variance Extracted (AVE) values above 0.5, ensuring that the indicators accurately represented their respective constructs (Fornell & Larcker, 1981).

Table 2. Construct Reliability and Validity

Variables	Composite reliability (rho_a)	Composite reliability (rho_c)	AVE
Product Attributes	0.740	0.846	0.647
Consumer Knowledge	0.825	0.858	0.674
Maximization Behavior	0.913	0.944	0.849
Choice Conflicts	0.892	0.911	0.774
Physical Intangibility	0.913	0.921	0.796
Perceive Decision Difficulty	0.916	0.946	0.854
Cart Abandonment	0.830	0.884	0.657

To address multicollinearity, Variance Inflation Factor (VIF) values were calculated, showing that all VIF values were below critical thresholds, indicating no significant multicollinearity issues. Structural path significance was tested using bootstrapping, which provided robust evidence for hypothesis testing by resampling data to assess the significance of the relationships between constructs. The R-square values indicated that the model explained a substantial proportion of variance for constructs such as consumer knowledge, choice conflicts, perceived decision difficulty, and cart abandonment, suggesting a good model fit (Cohen, 1988).

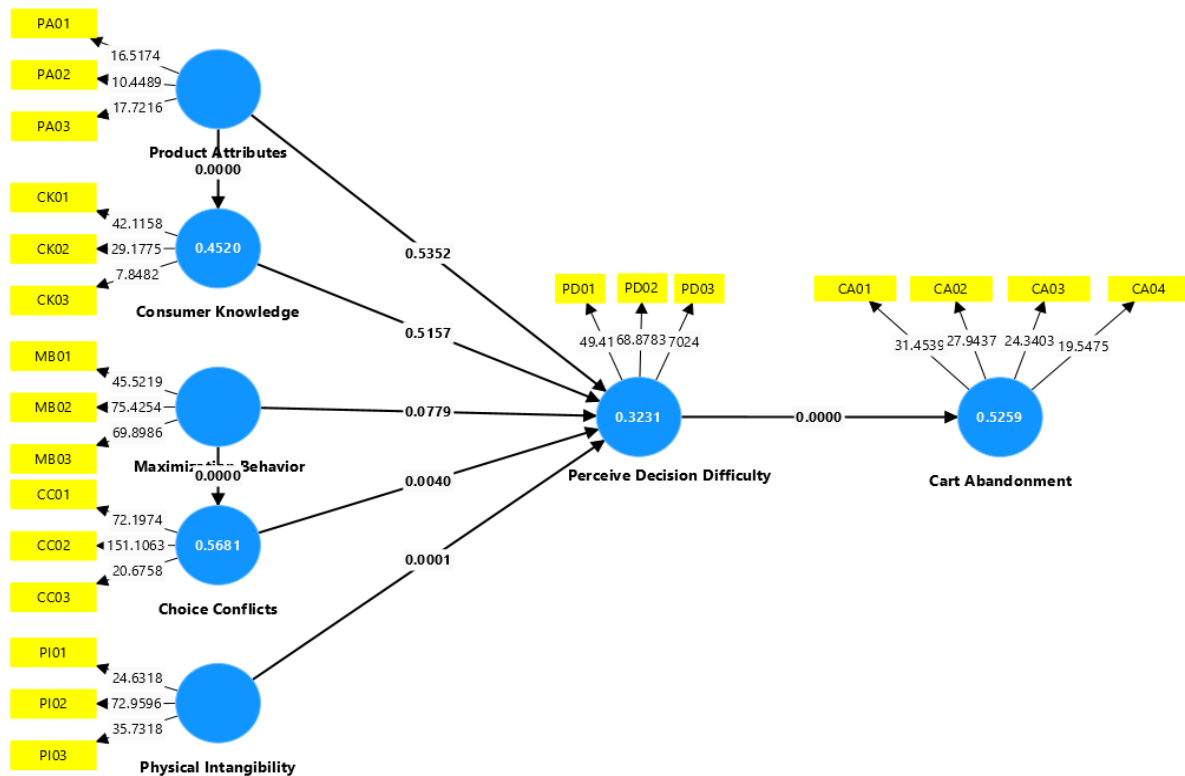


Figure 2. Structural Path (P values and T values) using PLS SEM

The F-test results demonstrated varying effect sizes among the constructs, with some variables showing large effects while others had no substantial effect. Hypothesis testing confirmed several significant relationships: product attributes strongly influence consumer knowledge but have little effect on perceived decision difficulty; consumer knowledge also has minimal impact on perceived decision difficulty; in contrast, maximization behavior significantly affects choice conflicts but has a negligible effect on perceived decision difficulty; choice conflicts and physical intangibility have small effects on perceived decision difficulty; lastly, perceived decision difficulty strongly influences cart abandonment.

Table 3. Hypothesis Testing

	Structural Path	Path Coef.	t Values	P Values
H1	Product Attributes -> Consumer Knowledge	0.6723	6.8569	0.0000
H2	Product Attributes -> Perceive Decision Difficulty	-0.0605	0.6201	0.5352
H3	Consumer Knowledge -> Perceive Decision Difficulty	0.0496	0.6500	0.5157
H4	Maximization Behavior -> Choice Conflicts	0.7537	15.7938	0.0000
H5	Maximization Behavior -> Perceive Decision Difficulty	0.1865	1.7633	0.0779
H6	Choice Conflicts -> Perceive Decision Difficulty	0.2818	2.8799	0.0040
H7	Physical Intangibility -> Perceive Decision Difficulty	0.2463	3.9638	0.0001
H8	Perceive Decision Difficulty -> Cart Abandonment	0.7252	17.3464	0.0000

D.2. Discussion

Product attributes significantly influence consumer knowledge in online apparel shopping.

Research strongly supports that product attributes, such as detailed descriptions, high-quality images, and comprehensive specifications, significantly enhance consumer knowledge. Studies by Lee et al. (2019) and Kim and Park (2021) demonstrate that these attributes increase consumer confidence and understanding, leading to more informed purchasing decisions. Zhang and Chen (2023) further highlight that clear product information contributes to consumer satisfaction and trust. Additionally, the integration of technologies like augmented reality (AR) has further improved consumer knowledge by allowing real-time visualization of products (Jang & Kim, 2022).

Product attributes significantly influence perceived decision difficulty in online apparel shopping.

The impact of product attributes on perceived decision difficulty is mixed. Some studies (e.g., Verhagen & van Dolen, 2018) suggest that while detailed product information can reduce uncertainty, it does not necessarily lower the perceived difficulty due to the complexity of choices. Lee and Kim (2020) also found that an abundance of information can overwhelm rather than assist consumers. However, Chen and Zhang (2021) argue that attributes related to fit, and quality can reduce decision difficulty, depending on how the information is presented. The current study's finding that product attributes alone may not significantly alter decision complexity highlights the need to consider additional factors, such as the number of product choices and consumer familiarity. While detailed product attributes provide essential information, the abundance of options available in online apparel shopping can overwhelm consumers, increasing perceived decision difficulty. Furthermore, consumers with prior experience or familiarity with a product or brand are likely to face less complexity when making decisions, as they require less information to make confident choices. Therefore, decision complexity is not solely driven by product attributes, but by a combination of factors, including choice overload and consumer knowledge, which together shape the overall shopping experience.

Consumer knowledge significantly influences perceived decision difficulty in online apparel shopping.

While consumer knowledge generally enhances decision-making, this study found that it does not significantly reduce perceived decision difficulty. Research by Park and Lee (2018) and Wang and Zhao (2020) shows that increased knowledge improves decision accuracy and confidence but does not necessarily ease cognitive load. However, Kim and Choi (2021) observed that focused and relevant knowledge can simplify decision-making. The relationship between consumer knowledge and perceived decision difficulty is complex, influenced by factors like choice complexity and the quality of information. While knowledge can enhance confidence and decision-making accuracy, it does not always reduce perceived difficulty. A large number of choices can overwhelm consumers, and the quality of information—whether detailed and relevant or excessive and unclear—plays a key role in simplifying or complicating the decision-making process. Therefore, the impact of consumer knowledge on decision difficulty depends on how it interacts with these other factors.

Maximization behavior significantly influences choice conflicts in online apparel shopping.

Maximization behavior, where individuals seek the best possible option by thoroughly evaluating all alternatives, significantly increases choice conflicts. Research shows that maximizers experience higher levels of conflict due to the extensive evaluation process and the fear of making suboptimal decisions. Studies by Schwartz et al. (2014) and Kueh and Voon (2018) confirm that this behavior leads to increased cognitive load and decision fatigue, intensifying conflicts among the numerous available options. However, Liu and Huang (2021) suggest that detailed product information and decision aids can help reduce these conflicts, although the overall positive relationship between maximization and choice conflicts remains strong.

Maximization behavior significantly influences perceived decision difficulty in online apparel shopping.

Contrary to expectations, this study found no significant effect of maximization behavior on perceived decision difficulty. While some research, like Schwartz et al. (2016), suggests that maximizers might experience higher decision difficulty due to their thorough search for the best option, other studies provide a mixed view. Liao and Xu (2019) found that while maximizers face decision-making challenges, their perceived difficulty isn't always higher, depending on factors like decision complexity and coping strategies. Li and Wang (2021) also noted that decision aids can mitigate perceived difficulty, indicating that the direct impact of maximization on decision difficulty is not as straightforward as previously thought.

Choice conflicts significantly influence perceived decision difficulty in online apparel shopping.

This hypothesis is supported by research showing that choice conflicts, where consumers struggle to choose between numerous appealing options, significantly increase perceived decision difficulty. Studies like Iyengar and Lepper (2015) and Lutz and Swaminathan (2018) found that more choices lead to greater cognitive load and stress, making decisions harder. This is further supported by Sweeney and Soutar (2021), who highlighted that choice conflicts heighten indecision and anxiety, thus increasing perceived difficulty. While tools like comparison charts can mitigate this effect, as noted by Chen and Zhang (2022), the link between choice conflicts and perceived decision difficulty remains robust.

Physical intangibility significantly influences perceived decision difficulty in online apparel shopping.

This hypothesis is supported by research showing that the inability to physically interact with products, such as trying on clothes, increases the perceived difficulty of making purchase decisions online. Studies like McCormick et al. (2017) and Lim and Dubinsky (2018) highlight how physical intangibility heightens uncertainty and cognitive load, making it harder for consumers to confidently choose products. However, innovations like virtual fitting rooms and AR tools, as noted by Jang and Kim (2022), can reduce this perceived difficulty by offering better product visualization.

Perceived decision difficulty significantly influences cart abandonment in online apparel shopping.

Research supports this hypothesis, showing that when consumers perceive making a purchase decision as difficult, they are more likely to abandon their shopping carts. Studies by Shah and Ranganathan (2019) and Jiang and Benbasat (2021) found that higher decision difficulty leads to frustration and cognitive overload, increasing the likelihood of cart abandonment. Kim and Park (2022) emphasize that simplifying the decision process can reduce abandonment rates, while Li and Zhang (2023) suggest that better user experience and clear product information can help mitigate this issue.

E. Conclusions & Recommendations

E.1. Conclusions

This study explores the factors influencing consumer behavior in online apparel shopping, focusing on product attributes, consumer knowledge, maximization behavior, choice conflicts, physical intangibility, perceived decision difficulty, and cart abandonment. Analyzing data from 200 respondents, the findings highlight that detailed product attributes enhance consumer knowledge by reducing uncertainty, yet this abundance of information can also overwhelm, complicating decision-making. While consumer knowledge improves decision quality, it doesn't always ease perceived difficulty due to the cognitive load of processing extensive information. Maximization behavior significantly increases choice conflicts but has little direct effect on perceived decision difficulty, as decision aids and coping strategies can moderate its impact. Choice conflicts, however, strongly influence perceived decision difficulty by increasing cognitive load and stress. Physical intangibility, or the inability to physically assess apparel, further exacerbates perceived decision difficulty, though technologies like virtual fitting rooms and augmented reality can help. The study's most significant finding is that perceived decision difficulty is a major driver of online cart abandonment, with factors like choice conflicts and physical intangibility leading to frustration and cognitive overload. Addressing these challenges through improved product information and decision support tools can reduce cart abandonment rates and enhance the online shopping experience.

E.2. Recommendations

Future research should explore practical strategies for reducing perceived decision difficulty in online shopping, focusing on optimizing product information and presentation without heavy reliance on technology. This includes understanding which aspects of product details and shopping experiences most impact decision-making and adapting successful practices from other industries. Apparel sellers should enhance shopping experiences by improving product descriptions. Clear, detailed descriptions with size guides, material information, and care instructions can help customers make informed decisions. Highlighting key attributes like fit, fabric, and style, along with showcasing customer reviews, builds trust and aids decision-making. Streamlining navigation with well-organized categories and user-friendly filters can also reduce overwhelm. E-commerce platforms can improve the shopping experience by offering high-quality product images and clear presentation guidelines for sellers. Simplifying the checkout process and providing training on customer service and optimization can further decrease decision difficulty and reduce cart abandonment.

REFERENCES

- Anggraini, R., & Lubis, A. R. (2021). The impact of social media influencers on consumer purchasing decisions: A case of the fashion industry in Indonesia. *International Journal of Business and Management*, 16(6), 112-125.
- Baymard Institute. (2020). E-commerce cart abandonment rate statistics. Retrieved from <https://baymard.com/lists/cart-abandonment-rate>
- Berg, A., Hedrich, S., & Russo, B. (2018). *The apparel sourcing caravan's next stop: Digitization and automation*. McKinsey & Company.
- Brucks, M., Zeithaml, V. A., & Naylor, G. (2019). Price and brand name as indicators of quality dimensions for consumer durables. *Journal of the Academy of Marketing Science*, 28(3), 359-374.
- Byrne, B. M. (2016). *Structural Equation Modelling with AMOS: Basic Concepts, Applications, and Programming* (3rd ed.). Routledge.
- Chernev, A., Böckenholt, U., & Goodman, J. (2015). Choice overload: A conceptual review and meta-analysis. *Journal of Consumer Psychology*, 25(2), 333-358.
- Cheek, N. N., & Schwartz, B. (2016). On the meaning and measurement of maximization. *Judgment and Decision Making*, 11(2), 126-146.
- Dar-Nimrod, I., Rawn, C. D., Lehman, D. R., & Schwartz, B. (2018). The maximization paradox: The costs of seeking alternatives. *Personality and Individual Differences*, 121, 110-115.
- Grewal, D., Ahlbom, C. P., Beitelspacher, L. S., Noble, S. M., & Nordfält, J. (2016). In-store mobile phone use and customer shopping behavior: Evidence from the field. *Journal of Marketing*, 80(4), 102-113.
- Grewal, D., Roggeveen, A. L., & Nordfält, J. (2017). The future of retailing. *Journal of Retailing*, 93(1), 1-6.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Sage Publications Inc.
- Hameed, S., Hyder, S., Imran, M., & Riaz, A. (2018). Impact of augmented reality on consumers' online purchase intention. *Journal of Internet Commerce*, 17(1), 25-40.
- Heller, J., Chylinski, M., de Ruyter, K., Mahr, D., & Keeling, D. I. (2019). Touching the untouchable: Exploring multi-sensory augmented reality in the context of online retailing. *Journal of Retailing*, 95(4), 219-234.
- Huang, E., & Benyoucef, M. (2020). The impact of augmented reality on consumer buying intention: A study of augmented reality fitting rooms in the apparel industry. *Journal of Retailing and Consumer Services*, 55, 102118.
- Huang, Z., & Benyoucef, M. (2015). User preferences of social features on social commerce websites: An empirical study. *Computers in Human Behavior*, 55, 1-10.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson Education.
- Li, C., & Liu, J. (2018). The effects of online store attributes on customer satisfaction and loyalty. *International Journal of Retail & Distribution Management*, 46(1), 21-37.