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The Mediating Role of Online Trust and Perceived Risk in the Relationship between Website Design and Purchase Intention

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Web Sitesi Tasarımı ve Satın Alma Niyeti İlişkisinde Çevrimiçi Güven ve Algılanan Riskin Aracılık Rolü

Abstract

Due to the advancement of technology and the widespread use of the internet, the factors influencing purchase intention in online shopping continue to be an ongoing research topic. In this context, it is believed that one of the key factors affecting consumer purchasing behaviour is website design. A well-designed website is expected to play a crucial role in establishing perceived trust, a key factor in the online shopping experience that influences consumers' purchase intentions. This study examines the impact of website design on purchase intention in online shopping, with a focus on the mediating roles of trust and perceived risk. In this context, the findings obtained from 215 university students suggest that website design has a positive effect on consumers' purchase intentions. Moreover, while online trust reduces the perceived risk associated with website design, it is an important mediating variable in the relationship between perceived risk and increased purchase intention.

Keywords : Website Design, Online Trust, Purchase Intention, Perceived Risk, Marketing Strategy, Consumer Behaviour.

JEL Classification Codes : M10, M30, L31, M81.

Öz

Teknolojinin gelişmesi ve internet kullanımının yaygınlaşmasıyla birlikte, çevrimiçi alışverişte satın alma niyetini etkileyen faktörler günümüzde halen araştırma konusu olmaya devam etmektedir. Bu bağlamda, tüketici satın alma davranışlarını etkileyen temel faktörlerden birinin web sitesi tasarımı olduğu düşünülmektedir. İyi tasarlanmış bir web sitesinin, tüketicilerin satın alma niyetlerini etkileyen çevrimiçi alışveriş deneyiminde önemli bir faktör olan algılanan güvenin oluşmasında kritik bir rol oynaması beklenmektedir. Bu çalışma, web sitesi tasarımının çevrimiçi alışverişte satın alma niyeti üzerindeki etkisini; güven ve algılanan riskin aracılık rolleri çerçevesinde incelemektedir. Bu kapsamda, 215 üniversite öğrencisinden elde edilen bulgular, web sitesi tasarımının tüketicilerin satın alma niyetleri üzerinde olumlu bir etkisi olduğunu ortaya koymaktadır. Ayrıca, çevrimiçi güvenin web sitesi tasarımıyla ilişkili algılanan riski azalttığı ve algılanan risk ile artan satın alma niyeti arasındaki ilişkide önemli bir aracılık değişkeni olduğu belirlenmiştir.

Anahtar Sözcükler : Web Sitesi Tasarımı, Çevrimiçi Güven, Satın Alma Niyeti, Algılanan Risk, Pazarlama Stratejisi, Tüketici Davranışı.

1. Introduction

The rise of digital commerce and internet usage in recent years has made online purchasing a popular choice among consumers, creating a competitive environment for both consumers and businesses. In 2023, the volume of e-commerce, which had reached significant figures in Türkiye, increased by 115.15% and reached 1.85 trillion TRY (eticaret.gov.tr). Globally, large companies like Amazon achieve leadership in e-commerce by adopting customer-oriented strategies and prioritising consumer trust. This approach has a pivotal role in their achievement and market dominance. The rapid growth of e-commerce is steadily increasing the importance of online shopping. It has become crucial for businesses to develop effective strategies to thrive and gain a competitive edge in this vast market. Especially in e-commerce, websites -the digital face of companies -have become a crucial factor influencing consumers' purchasing behaviour. In this context, a website's design plays a significant role in attracting customers to online stores. Website design, which is perceived as a critical factor in reducing trust and risk, helps consumers feel more secure when shopping online (Cyr et al., 2009). It is also noted in the literature that factors such as design and information security have an impact on consumers' risk perceptions. Effective website design minimises customers' concerns about fraud (Kim & Stoel, 2004). According to Everard and Galletta (2005), their research indicates that a trust-oriented view of a website lowers consumers' perception of risk and encourages them to engage in purchasing activities. Additionally, a website serves as a crucial source of information that alleviates the uncertainties associated with online shopping for consumers and enhances their trust in the online buying process (Weisberg et al., 2011). The existence of a trustworthy area in the increasing online purchasing habits of consumers enhances the success of the business (Kim et al., 2008: 45). Website design plays a crucial role in establishing trust and loyalty. It also enhances a company's reputation, boosts competitiveness, and influences consumers to translate their purchase intentions into actual behaviour. Websites must provide a reliable environment with accurate information during the persuasion stage of consumers' purchasing decisions, as the website design is aimed at creating a trustworthy form to minimise consumers' online purchase fears (Constantinides, 2004). Customers may have concerns about online platforms and uncertainties that influence their purchasing decisions, which is also referred to as perceived risk and directly impacts the customer (Chellappa, 2005; Johnson et al., 2005; Chen et al., 2011).

Existing literature primarily investigates the direct impact of website design, trust, perceived risk, and purchase behaviour. McKnight et al. (2002) argue that consumer distrust in online shopping stems from perceived risk and lack of experience. Similarly, Hong and Cha (2013) examined the relationship between consumer trust and online purchase intention, confirming its positive effect. Demirdöğmez and Gültekin (2020) concluded that trust in the website, perceived value, e-loyalty, Customer satisfaction, repeat purchase intention, and perceived risk are only practical predictors of repurchase intention. Cesur and Tayfur (2015) found a significant inverse relationship between perceived risk and online shopping in their study. Yeniçeri et al. (2012) concluded that as consumers' risk perceptions increase, their tendency to shop online decreases. Peng and Kim (2014) showed that the design of the

website contributes to the reduction of perceived risk by affecting consumer perception. Ko et al. (2004) investigated the cultural variations in consumers' perceived risk related to web design and concluded that user-friendly websites reduce perceived risk. Lăzăroiu et al. (2020) examined the influence of user experience and web design on consumers' risk perceptions in online shopping.

This study examines the influence of website design on online purchasing intentions, as well as the roles of trust and perceived risk in this context. The literature review discusses website design, trust, perceived risk, and consumer purchasing behaviour. The methodology section describes the research approach, while the results section presents the findings. Finally, the conclusion interprets the results and provides recommendations for future research avenues.

2. Theoretical Background

The literature supports that a well-designed website enhances perceived quality, satisfaction, and positive attitudes toward the website, ultimately improving customer satisfaction (Chou et al., 2015). Cho and Park (2001) identified website design quality as a key determinant of customer satisfaction in the e-commerce landscape. Likewise, Wolfenbarger and Gilly (2003) observed that online shoppers tend to favour retailers with intuitive, easy-to-navigate interfaces rather than those requiring frequent assistance from customer service agents. These findings highlight the importance of a seamless, user-friendly website design in enhancing the online shopping experience and fostering customer loyalty. This highlights that a website's interface functions play a crucial role in shaping customer satisfaction (Cyr et al., 2010). Constantinides (2004) defines website design based on two key factors: usability and interaction. It is highlighted that website design encompasses a range of elements, including text, images, graphics, sound, layout, motion, and content. Website analysis is approached from two perspectives: process and architecture. The process is viewed as a sequence of systems, while the system is defined as the collection of documents contained within a web page (Kim & Lee, 2002).

Architectural design encompasses information, layout, engagement, and aesthetics, each serving a specific function. Layout refers to how data is organised, while aesthetics focuses on the emotional impact of the website. Cho and Park (2001) found that the quality of website design is a crucial factor influencing customer satisfaction in the e-commerce realm. Similarly, Wolfenbarger and Gilly (2003) noted that shoppers prefer online retailers with intuitive and easy-to-navigate interfaces over those that require customer service support. Navigation design focuses on the interactive features of a website, guiding users seamlessly through different sections with intuitive menus, links, and functional elements that enhance usability. Meanwhile, visual design encompasses the overall aesthetics, including layout, typography, colour schemes, and graphical elements, all of which contribute to shaping users' perceptions and engagement. Together, these design aspects play a crucial role in enhancing the user experience, fostering trust, and ultimately

influencing consumers' purchasing decisions in online shopping environments (Ganguly et al., 2010).

Studies highlight the significant impact of colour attractiveness on trust in website design. Cyr et al. (2010) emphasised the effect of attractive colour usage on building trust on a website, and Pengnate and Sarathy (2017) highlighted the positive impact of a visually compelling website on customer trust. Website design elements, such as style, colour, background, and text animations, are believed to positively influence the emotional state of consumers who prefer online shopping (Ha & Im, 2011). In their study, Cyr and Bonanni (2005) discuss the potential impact of the content of information and the quality of graphics used on the user experience on a website.

Trust is an essential emotion that significantly influences consumers' repeat purchase behaviour from a specific online seller (Ou & Sia, 2010). The literature offers various definitions of trust, particularly within the scope of online trust, which is recognised as a multidimensional concept. Online trust lacks a universally accepted definition but plays a crucial role in influencing customer purchasing decisions (Lee & Turban, 2001; Yoon, 2002). In contrast, online trust can be understood in terms of institutional trust, dispositional trust, and interpersonal trust (Tan & Sutherland, 2004). Generally recognised as an essential element in social and economic interactions, trust, according to Segovia et al. (2009), is characterised as a subjective evaluation directed towards the uncertainties that may arise in a buyer's expectations of the seller during the interaction process. With the increasing focus on digital commerce, trust is considered the most crucial factor influencing consumers' transactions. It directly influences consumers' perceptions of online shopping and has an indirect impact on their purchasing intentions. According to Tandon et al. (2020), factors such as convenience, reliability, confidentiality of information, and the content of web pages are believed to influence consumers' purchase intentions in online shopping. Hassanein, Head, and Ju (2009) found that designs equipped with socially compelling and rich visuals instil more trust in customers. Ou and Sia (2010) emphasised that website design features significantly affect customers' trust and distrust. Furthermore, Cyr et al. (2010) highlighted the effect of colour attractiveness on customers' trust and distrust, emphasising the importance of visually appealing website design (Pengnate & Sarathy, 2017). Studies in the literature recognise trust as one of the most critical factors in online shopping. Reducing trust issues and providing consumers with a more comfortable shopping experience is of great importance for businesses (Gambarov, 2014: 1-2). Trust, a fundamental factor in establishing and maintaining long-term relationships between buyers and sellers, is observed to be built upon various elements involving mutual individuals or organisations (Sharma, 2000: 471; Subaşı, 2012: 5-6). Numerous studies highlighting the significance of online shopping are presented in the literature. The relevant research emphasises that consumers' perceptions of trust in online shopping are associated with shared information and fulfilled promises (Yaşın et al., 2017; Alkibay & Demirgüne, 2016; Habiboğlu et al., 2021).

This study examines the influence and significance of trust in website design on purchase intention in online shopping. Accordingly, the H1 hypothesis has been formulated.

H1: Website design has a positive effect on purchase intention.

The concept of perceived risk, initially introduced by Baur (1960), refers to the doubts and uncertainties that consumers experience both before and after making a purchase. This uncertainty arises from the possibility that the anticipated outcome may not align with their expectations, leading to concerns about potential losses, dissatisfaction, or financial implications. Chellappa (2005) further elaborated on perceived risk as the challenges and uncertainties consumers face when they struggle to make informed purchasing decisions due to limited information or ambiguity.

In the realm of online shopping, perceived risk is significantly amplified due to the absence of physical interaction with both sellers and products. Unlike traditional retail settings, where consumers can physically examine products and engage with sales representatives for assurance, online platforms depend entirely on digital representations, customer reviews, and product descriptions. This lack of direct sensory experience heightens uncertainty, making consumers more vigilant and hesitant in their purchasing decisions. Additionally, concerns related to payment security, potential fraud, data privacy breaches, and the possibility of receiving products that deviate from their advertised quality further exacerbate this perceived risk, ultimately influencing consumer trust and purchase intention. Extensive research has emphasised the critical role of perceived risk in shaping consumer perception, decision-making, and purchasing behaviour across both online and offline environments. For instance, Johnson et al. (2005) and Chen et al. (2011) emphasise that high levels of perceived risk can lead to hesitation, reduced trust in online platforms, and lower purchase intentions. Additionally, research suggests that perceived risk plays a crucial role before the actual purchase behaviour occurs, influencing the decision-making process during the early stages of consumer intention formation.

Given its substantial influence, the perceived risk remains a critical factor in understanding consumer behaviour, particularly in digital marketplaces. Businesses and e-commerce platforms must address these concerns by implementing trust-building mechanisms, such as enhanced security measures, transparent return policies, user reviews, and robust customer support systems, to mitigate risk perceptions and improve consumer confidence.

Cox and Rich (1964) emphasised the influence of uncertainty on purchase decisions. Yoon (2002) highlighted that the absence of a salesperson, the distance between the seller and the customer in the trust process for online transactions, and the lack of physical interaction between them create a more intense risk environment. Establishing a trust relationship, however, can reduce the perceived risk.

Trust plays a critical role in shaping consumer behaviour in online transactions. A lack of confidence in internet-based purchases can lead to consumer hesitation, negatively impacting their willingness to purchase products or services. This distrust, in turn, disrupts the overall online shopping process (Martin et al., 2011). Perceived risk is a key factor

influencing online purchase intentions. Higher levels of perceived risk tend to discourage consumers from completing transactions. Concerns related to privacy and the potential misuse of personal information often deter users from sharing their data online.

Jarvenpaa et al. (2000) found that higher perceived risk significantly reduces the likelihood of purchase, highlighting its detrimental impact on consumer buying decisions. However, they also observed that consumers may still proceed with an online purchase if they perceive the risk to be low, even if they do not hold an exceptionally positive attitude toward the store. Furthermore, the perception that online businesses can securely manage transactions significantly affects purchase behaviour. When consumers lack trust in an online business, their willingness to make a purchase decreases. Therefore, trust is a fundamental factor that positively influences online purchase intention (Kuan & Bock, 2007). Trust is widely recognised as the most crucial factor influencing online shopping behaviours and repeated transactions. It plays a fundamental role in the success of electronic commerce by facilitating consumers' purchasing decisions (John, 2012). However, a lack of trust remains a significant barrier to online shopping, primarily due to consumers' perceived risk and limited experience. Perceived risk serves as a key mediator in the relationship between trust and purchase intention, making it an essential factor in understanding consumer behaviour in e-commerce (Qalati et al., 2021: 15).

The quality, design, and functionality of a website heavily influence consumers' perceived risk in online shopping. A well-structured, visually appealing, and user-friendly interface can enhance trust and mitigate uncertainty, whereas a poorly designed or dysfunctional website may amplify concerns regarding security, reliability, and overall shopping experience. According to the Perceived Risk Theory (PRT), individuals evaluate the potential for uncertainty and adverse outcomes before making a purchasing decision (Bauer, 1960). In this context, a professionally designed website that is easy to navigate and equipped with robust security features can significantly reduce perceived risk levels (Kim & Stoel, 2004).

Furthermore, within the framework of the Technology Acceptance Model (TAM), users are more inclined to interact with and utilise a website they perceive as trustworthy, user-friendly, and intuitively designed, as these factors enhance their overall experience and confidence in the platform. A positive perception of a website's usability reduces the perception of risk and increases purchase intention (Davis, 1989; Gefen et al., 2003). Empirical research supports this notion, demonstrating that a well-designed website fosters consumer trust and lowers perceived risk, ultimately encouraging online purchases (Chang & Chen, 2008; Pavlou, 2003). For example, Fang et al. (2011) found that the visual aesthetics and functional aspects of a website have a direct impact on consumers' risk perception. Similarly, Cyr et al. (2009) concluded that when a website is both visually appealing and functionally efficient, consumers perceive lower levels of risk and exhibit stronger purchase intentions.

These findings highlight the importance of website design in influencing consumer trust and reducing perceived risk. Businesses aiming to enhance customer confidence and encourage online transactions should prioritise the development of secure, user-friendly, and visually appealing e-commerce platforms.

In this context, H2, H3, and H4, hypotheses have been formulated as follows;

H2: Website design has a positive effect on online trust.

H3: Website design has a negative effect on perceived risk.

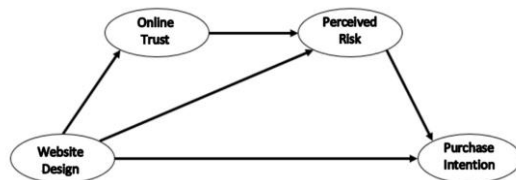
H4: Online trust and perceived risk sequentially mediate the effect of website design on purchase intention.

3. Data and Methodology

The study employed a convenience sampling method involving university students who voluntarily participated through an online survey platform. A total of 215 responses were collected and analysed using a quantitative approach. The sample included 83 female and 132 male participants. Regarding age distribution, 91 participants were aged 18-20, 113 were aged 20-25, and 11 were aged 25-30. The survey, comprising 21 statements, was conducted with university students voluntarily between January 1, 2022, and March 1, 2022.

To investigate the mediating influence of trust on the relationship between website design and purchasing behaviour, the website design scale developed by Cyr (2008) and used in Ganguly et al.'s (2010) study was employed to measure the participants' evaluations. For the trust scale developed by Chellappa (2005), Suh and Han (2003) used seven questions to measure the participants' trust perceptions, while the perceived risk scale developed by Chan and Lu (2004) consisted of four questions. For the last measurement, the purchase scale developed by Suh and Han (2003), composed of three questions, was used to measure purchase intention.

Figure: 1
Research Model



Within the research model, the effect of website design on buying intentions is examined in terms of online trust and perceived risk. While the website design effect is discussed, online trust and perceived risk are identified as mediators to determine whether they play a mediating role in influencing purchase intention. In the study, we also controlled demographic characteristics such as gender, age, and internet usage.

4. Findings

A confirmatory factor analysis (CFA) was performed using IBM AMOS 24 to assess the structural validity of the measurement tools. The fit indices reported (see Table 1) demonstrate a satisfactory model fit, consistent with the guidelines suggested by Hu & Bentler (1999). These findings validate the structural integrity of both the measurement model and the causal model, confirming their reliability and strength in evaluating the intended constructs.

Table: 1
The Goodness of Fit Indices for the Measurement Model and Causal Model

	χ^2	sd	χ^2/sd	CFI	SRMR	RMSEA
1. Measurement Model	279.44	170	1.64	0.92	0.06	0.06
2. Causal Model	336.94	200	1.685	0.90	0.07	0.06

n = 215, χ^2/sd = chi-square degrees of freedom ratio, CFI = Comparative fit index, SRMR = Root mean square error of the standardized mean, RMSEA = Root mean square error of approximation.

To assess the reliability of the scales, composite reliability was calculated, and it was observed that the scales have acceptable levels of reliability. To examine the discriminant validity of the measurement instruments, HTMT (Heterotrait-Monotrait) analysis was conducted, and all values were found to be below the threshold of 0.85 (Henseler et al., 2015), indicating that each scale represents a distinct construct.

Table: 2
Reliability and Correlation Values of Research Variables

Variables	CR	1	2	3	4	5	6
1. Gender (1:F, 2:M)	-						
2. Age	-	0.01					
3. Year of Internet Use	-	0.27**	0.14*				
4. Website Design	0.86	-0.10	-0.04	0.06			
5. Online Trust	0.84	-0.12	-0.08	0.13	0.73**		
6. Perceived Risk	0.65	0.13	0.09	-0.09	-0.66**	-0.71**	
7. Purchase intention	0.67	-0.11	-0.11	0.18*	0.51**	0.47**	-0.75**

n = 215, * $p < 0.05$, ** $p < 0.01$, CR = composite reliability.

The results support Hypothesis H1, demonstrating that website design has a significant and positive influence on purchase intention ($r = 0.51$, $p < 0.01$). Similarly, hypothesis H2 received support, indicating a positive relationship between website design and online trust ($r = 0.73$, $p < 0.01$). Hypothesis H3 was confirmed in its original form, as the connection between website design and perceived risk was found to be negative ($r = -0.66$, $p < 0.01$). Additionally, hypothesis H4 was strongly supported, indicating that online trust and perceived risk serve as sequential mediators in the relationship between website design and purchase intention. A significant and negative correlation was found between online trust and perceived risk ($r = -0.71$, $p < 0.01$), as well as a positive relationship between online trust and purchase intention ($r = 0.47$, $p < 0.01$). Furthermore, a strong negative association exists between perceived risk and purchase intention ($r = -0.75$, $p < 0.01$), indicating that an increase in consumers' perception of risk is associated with a decrease in their intention to purchase.

A structural equation modelling (SEM) analysis was performed to test the research hypotheses. The direct effect values are presented in Table 3, while the indirect effect values are detailed in Table 4. To assess the significance of these effects, the bootstrap technique was applied with 5000 bootstrap resamples, using a 95% confidence interval (CI) approach (Preacher & Hayes, 2008; Shrout & Bolger, 2002). The results revealed that website design has a significant positive effect on online trust ($B = 0.70$, 95% CI [0.53, 0.92]), thereby supporting Hypothesis H2. However, website design did not exhibit a direct significant effect on perceived risk or purchase intention, leading to the rejection of Hypotheses H3 and H1.

Furthermore, online trust demonstrated a significant adverse effect on perceived risk ($B = -0.40$, 95% CI [-0.78, -0.21]), while perceived risk had a substantial adverse effect on purchase intention ($B = -0.76$, 95% CI [-1.26, -0.29]). These findings suggest that trust plays a crucial role in reducing perceived risk, which, in turn, influences consumers' purchasing decisions. Additionally, the number of years of internet usage was found to have a significant positive effect on purchase intention ($B = 0.12$, 95% CI [0.02, 0.20]), indicating that more experienced internet users are more likely to engage in online shopping. Conversely, gender and age did not have a statistically significant impact on purchase intention, suggesting that these demographic factors do not play a decisive role in shaping consumers' online purchasing behaviour. These findings underscore the significance of trust in mitigating perceived risk and emphasise the indirect role of website design in influencing purchase intention through trust-building mechanisms.

Table: 3
Direct Effect Estimates in Structural Equation Model Analysis

Direct Effects	B	SE	β	%95 CI	
				LL	UL
Online Trust \leftarrow Website Design	0.70**	0.91	0.74	0.53	0.92
Perceived Risk \leftarrow Online Trust	-0.40**	0.12	-0.46	-0.78	-0.21
Perceived Risk \leftarrow Website Design	-0.28	0.11	-0.33	-0.71	0.04
Purchase Intention \leftarrow Perceived Risk	-0.76**	0.18	-0.65	-1.26	-0.29
Purchase Intention \leftarrow Website Design	0.06	0.13	0.06	-0.31	0.49
Purchase Intention \leftarrow Years of Internet Use	0.12*	0.05	0.16	0.02	0.20
Purchase Intention \leftarrow Age	-0.12	0.08	-0.10	-0.28	0.04
Purchase Intention \leftarrow Gender	-0.11	0.09	-0.08	-0.29	0.08

n = 215, bootstrap sample=5000. * $p < .05$, ** $p < .01$, B = unstandardized regression coefficient, SE = standard error, β = standardized regression coefficient, 95% CI = 95% confidence interval.

An analysis of the indirect effects within the research framework revealed that website design indirectly reduces perceived risk through online trust, demonstrating a significant negative mediating effect ($B = -0.28$, 95% CI [-0.54, -0.02]). Additionally, online trust was found to play a crucial positive mediating role in the relationship between perceived risk and purchase intention ($B = 0.43$, 95% CI [0.16, 0.79]), highlighting its significant role in shaping consumer behaviour. Furthermore, the results confirm that online trust and perceived risk, as sequential mediators, effectively link website design to purchase intention ($B = 0.43$, 95% CI [0.16, 0.79]). These findings affirm the final hypothesis of the study, reinforcing the idea that a well-designed website fosters trust, mitigates perceived risk, and ultimately enhances consumers' purchase intentions.

Table: 4
Indirect Effect Estimates in Structural Equation Model Analysis

Indirect Effects	B	SE	β	%95 CI	
				LL	UL
Perceived Risk \leftarrow Website Design	-0.28	0.13	-0.33	-0.54	-0.02
Purchase Intention \leftarrow Online Trust	0.31	0.15	0.29	0.01	0.61
Purchase Intention \leftarrow Website Design	0.43	0.19	0.43	0.16	0.79

n = 215, bootstrap sample = 5000, *B* = unstandardized regression coefficient, *SE* = standard error, β = standardized regression coefficient, 95% *CI* = 95% confidence interval.

5. Discussion and Conclusion

The widespread use of technology, driven by globalisation and the emergence of trade beyond borders, has given e-commerce a new dimension in light of these developments, making it more popular among businesses. Today, websites, which are the customer-facing side of the companies that step into e-commerce, play a crucial role in achieving a competitive advantage. It is seen as a critical factor in converting visitors into potential customers, as the content and information on websites play a dual role in attracting customers and contributing to the success of businesses.

According to the results, it is observed that trust serves as an important mediator in purchase intention, which is defined as the creation of demand for purchasing in consumers. Accordingly, it is believed that a website designed to maintain an optimal experience by creating a positive impact on the customer reinforces a sense of trust. It is expected that a website that provides services to consumers in the shortest time and with the most accurate information by understanding their needs and wants also makes a positive contribution to purchase intention. Thus, according to previous research (Lee & Turban, 2001; Yoon, 2002; Ou & Sia, 2010), the results support the fact that online trust is a fundamental dimension of purchase intention.

Depending on the study's results, it has also been concluded that the duration consumers spend on the Internet is effective in influencing purchase intention and that related behaviour varies by gender and age. Variability depending on demographic factors, which is one of the important results of the study, can be considered a valuable output for businesses to set the right target. Businesses focusing on digital marketing strategies must understand the purchasing behaviour of customers, taking into account the time spent on internet usage, to access new customer groups.

The study's findings, which reveal a negative correlation between perceived risk and purchase intention, suggest that an increase in perceived risk directly reduces consumers' willingness to make a purchase. Since trust is recognised as a key driver in enhancing purchase intention (Sharma, 2000; Subaşı, 2012; Kuan & Bock, 2007; Gambarov, 2014), it becomes evident that heightened perceived risk acts as a barrier to building online trust, ultimately reducing the likelihood of completing a purchase.

Minimising risk factors on a website can significantly enhance the success of online purchasing behaviour. However, the findings do not indicate a direct relationship between

perceived risk associated with website design and purchase intention. Instead, research suggests that online trust has a negative impact on perceived risk, which in turn influences purchase intention (Johnson et al., 2005; Chen et al., 2011). This underscores the crucial role of trust for online service providers in retaining existing customers and attracting new ones. Additionally, an analysis of the mediating roles of online trust and perceived risk within the research model confirms that online trust serves as a key mediator in reducing the perceived risk associated with website design, thereby reinforcing its importance in fostering consumer confidence and engagement in digital commerce.

According to the research results, it was also concluded that online trust serves as an important mediating variable between perceived risk and the increase in purchase intention. Website designs, which play a crucial role in online shopping processes, significantly impact a business's competitiveness in the market. If the bond between the company and its consumers is based on a strong sense of trust, then sales increase as a result of this strong relationship.

It is hoped that the results of this study will facilitate a more profound understanding among practitioners of why and how web design is related to purchase intent. According to our findings, website design reduces the level of risk in the eyes of the customer by ensuring that users have confidence in the company's website. As the risk perception in the shopping environment is mitigated, customers are more inclined to exhibit heightened purchase intention. Accordingly, it can be suggested that companies that focus on designing websites that ensure they are perceived as trustworthy by their customers may increase the likelihood of customers making purchases.

It is noted that studies investigating the mediating role of trust in the relationship between websites and purchase intention have been limited. It is believed that the results capturing perceived risk and online trust have been first investigated in related research. However, Sultan et al. (2005) was the first scholarly work to test the trustworthiness of website design characteristics. However, our study is still limited, as other factors, such as cybersecurity issues and fintech operations, also affect online trust. It is recommended that subsequent research be conducted on the potential for enhancing the perceived reliability of business websites by improving their design and layout. Furthermore, brand equity, cultural factors or customer behaviours could be alternative variables to be investigated for future studies. Although the results could provide a framework on a scholarly basis, the research focus is particularly beneficial for marketing managers and firm strategies, as e-commerce and digitalization become increasingly important daily.

References

- Alam, S. (2020), "Examining the impact of ethical online retailing on consumers' repurchase intention in India", *International Journal of Management*, 11(6), 361-368.
- Alkibay, S. & B.K. Demirgüneş (2016), "Evaluating trust and perceived risk dimensions in online clothing shopping", *Research Journal of Business and Management*, 3(2), 157-172.

- Bauer, R. (1960), "Consumer Behavior as Risk-Taking", in: R. Hancock (ed.), *Dynamic Marketing for A Changing World: Proceedings of the 43rd National Conference of the American Marketing Association* (389-398), Chicago, IL: American Marketing Association.
- Chang, H.H. & S.W. Chen (2008), "The Impact of Online Store Environment Cues on Purchase Intention", *Online Information Review*, 32(6), 818-841.
- Chou, S. et al. (2015), "Female Online Shoppers: Examining the Mediating Roles of E-Satisfaction and E-Trust on E-Loyalty Development", *Internet Research*, 25(4) 542-561.
- Constantinides, E. (2004), "Influencing the online consumer's behavior: The web experience", *Internet Research*, 14(2), 111-126.
- Curtis, T. et al. (2011), "Customer loyalty, repurchase and satisfaction: A meta-analytical review", *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 24, 1-26.
- Cyr, D. & C. Bonanni (2005), "Gender and website design in e-business", *International Journal of Electronic Business*, 3(6), 565-582.
- Cyr, D. et al. (2009), "Exploring human images in website design: A multi-method approach", *MIS Quarterly*, 33(3), 539-566.
- Cyr, D. et al. (2010), "Colour appeal in website design within and across cultures: A multi-method evaluation", *International Journal of Human-Computer Studies*, 68(1-2), 1-21.
- Davis, F.D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", *MIS Quarterly*, 13(3), 319-340.
- Fang, X. et al. (2011), "Moderating effects of task type on wireless technology acceptance", *Journal of Management Information Systems*, 22(3), 123-157.
- Gambarov, V. (2014), "Elektronik Ticarete Güven Oluşturan Faktörler ve Satın alma Niyetine Etkileri Üzerine Bir Araştırma", *Doktora Tezi*, Marmara Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Anabilim Dalı, Üretim Yönetimi ve Pazarlama Bilim Dalı, İstanbul.
- Ganguly, B. et al. (2010), "The effects of website design on purchase intention in online shopping: The mediating role of trust and the moderating role of culture", *International Journal of Electronic Business*, 8(4/5), 302-330.
- Gefen, D. (2000), "E-commerce: The Role of Familiarity and Trust", *Omega*, 28(6), 725-737.
- Gefen, D. et al. (2003), "Trust and TAM in online shopping: An integrated model", *MIS Quarterly*, 27(1), 51-90.
- Ha, Y. & H. Im (2012), "Role of website design quality in satisfaction and Word of mouth generation", *Journal of Service Management*, 23(1), 79-96.
- Habiboğlu, Ö. et al. (2021), "E-Perakendecilerin Bilgi Yönetimi ve Tüketici Çevrimiçi Güven Unsurlarına İlişkin Uygulamaları: Ampirik Bir Çalışma", *Journal of Research in Business*, 6(2), 303-318.
- Hassanein, K. et al. (2009), "A cross-cultural comparison of the impact of social presence on website trust, usefulness and enjoyment", *International Journal of Electronic Business*, 7(6), 625-641.
- Henseler, J. et al. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Hofstede, G. (1991), *Culture and Organizations: Software of the Mind*, McGraw-Hill, New York, NY.

- Hu, L-T. & P.M. Bentler (1999), "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives", *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Jarvenpaa, S.L. et al. (2000), "Consumer trust in an Internet store", *Information Technology and Management*, 1(1-2), 45-71.
- Kim, D.J. et al. (2008), "A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents", *Decision Support Systems*, 44(2), 544-564.
- Kim, H.W. et al. (2012), "Which is more important in Internet shopping, perceived price or trust?", *Electronic Commerce Research and Applications*, 11(3), 241-252.
- Kim, J. & J. Lee (2002), "Critical design factors for successful e-commerce systems", *Behavior and Information Technology*, 21(3), 185-199.
- Kim, M. & L. Stoel (2004), "Apparel retailers: Website quality dimensions and satisfaction", *Journal of Retailing and Consumer Services*, 11(2), 109-117.
- Kluckhohn, C. & W.H. Kelly (1945), "The concept of culture", in: R. Linton (ed.), *The Science of Man in the World Crisis* (78-106), Columbia University Press, New York.
- Kroeber, A. & C. Kluckhohn (1952), *Culture*, Meridian Books, New York.
- Lee, M.K.O. & E. Turban (2001) "A trust model for consumer internet shopping", *International Journal of Electronic Commerce*, 6(1), 75-91.
- Li, H. et al. (2015), "The interplay between value and service quality experience: E-loyalty development process through the eTailQ scale and value perception", *Electronic Commerce Research*, 15(4), 585-615.
- Martin, S.S. et al. (2011), "Dual Effect of Perceived Risk on Cross-National E-commerce", *Internet Research*, 21(1), 46-66.
- Nguyen, H.T.T. et al. (2020), "Development and validation of a scale measuring hotel website service quality (HWebSQ)", *Tourism Management Perspectives*, 35, 100697.
- Ou, C.X. & C.L. Sia (2010), "Consumer trust and distrust: An issue of website design", *International Journal of Human-Computer Studies*, 68(12), 913- 934.
- Pavlou, P.A. (2003), "Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model", *International Journal of Electronic Commerce*, 7(3), 101-134.
- Pengnate, S.F. & R. Sarathy (2017), "An experimental investigation of the influence of website emotional design features on trust in unfamiliar online vendors", *Computers in Human Behavior*, 67, 49-60.
- Preacher, K.J. & A.F. Hayes (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior Research Methods*, 40, 879-891.
- Segovia, R.H. et al. (2009), "Paralingual website design and trust in e-government", *International Journal of Electronic Government Research*, 5(1), 36-49.
- Sharma, N. & P.G. Patterson (2000), "Switching Cost, Alternative Attractiveness and Experience as Moderators of Relationship Commitment in Professional, Consumer Services", *International Journal of Service Industry Management*, 11(5), 470- 490.

- Shrout, P.E. & N. Bolger (2002), "Mediation in experimental and nonexperimental studies: New procedures and recommendations", *Psychological Methods*, 7, 422-445.
- Subaşı, H.H. (2012), "Elektronik Ticaret ve Güven: Bir Araştırma", *Yüksek Lisans Tezi*, Ankara: Gazi Üniversitesi, Sosyal Bilimler Enstitüsü.
- Sultan, F. et al. (2005), "Determinants and role of trust in e-commerce: A large-scale empirical study", *Journal of Marketing*, 69, 133-152.
- Tan, F.B. & P. Sutherland (2004), "Online consumer trust: a multi-dimensional model", *Journal of Electronic Commerce in Organizations*, 2(3), 40-58.
- Van der Heijden, H. et al. (2003), "Understanding online purchase intentions: Contributions from technology and trust perspectives", *European Journal of Information Systems*, 12(1), 41-48.
- Weisberg, J. et al. (2011), "Past purchase and intention to purchase in e-commerce: The mediation of social presence and trust", *Internet Research*, 21(1), 82-96.
- Yaşın, B. et al. (2017), "Tüketicilerin çevrimiçi perakende alışveriş sitelerine yönelik sadakatleri üzerinde memnuniyet, güven ve kalite algılarının rolü", *Yönetim: İstanbul Üniversitesi İşletme İktisadi Enstitüsü Dergisi*, 28(83), 24-47.
- Yoon, S.-J. (2002), "The Antecedents and Consequences of Trust in Online Purchase Decisions", *Journal of Interactive Marketing*, 16(2), 47-63.