



Impact of Website Attributes Factors on Online Purchase Intention: Mediating Role of Attitude: A South Indian Perspective

Karthikeyan Thangaraju

College of Management, SRM Institute of Science and Technology, kattankulathur, Chennai

*Corresponding Author Email: - kt7444@srmist.edu.in

Received: 11 May 2025 • Accepted: 12 April 2026 • Published: 15 June 2026

Abstract

Nowadays, online buying is a phenomenon that is expanding quickly. The biggest competitors in this market are growing exponentially, which suggests that there is still a sizable market for e-commerce. Online shopping is becoming more and more popular with consumers, especially middle-aged shoppers in South India, thanks to its convenience. The popularity of internet purchasing has increased retailers' interest in concentrating on this market. As a result, the focus of this study is on a number of variables influencing online purchase intention and the mediating role of attitude. Data were gathered from a sample of predominantly middle-aged adults (aged 21 to 45) who were experienced with using the internet and had done some online shopping. To evaluate the hypotheses, a structural equation modelling approach was used. All of the predictors had a substantial link with the dependent variable, Purchase intention, according to the findings. Purchase intent is the next most important predictor, followed by security/privacy. Additionally, 6 of the 10 hypotheses are important. Regarding the predictors and the dependent variable, the mediator attitude has no influence. Discussion of the theoretical and managerial implications follows.

Keywords: Online search, Purchase Intention, surfing, security and privacy

INTRODUCTION

E-commerce and online shopping in the Indian scenario have seen significant growth and potential for future development. The Indian e-commerce industry has been behind its counterparts in developed and emerging economies due to a relatively low internet user base (Prateek, p. 2016) (Madhurima, 2017). However, increased technological proliferation, internet and mobile penetration, and the launch of 4G services have created a favourable ecosystem for e-commerce in India (Madhurima, p. 2017). The country is currently at the cusp of a digital revolution, with the extension of internet and broadband to remote areas and the availability of low-cost smartphones contributing to the growth of the internet user base (Gangeshwer. (2013). The online retail sector holds a significant share of non-travel B2C e-commerce in India, and its prospects for future growth are positive (Uttiya,

2016). Factors such as convenience, easy access to products and information, and enjoyment on the part of customers have contributed to the increased use of online shopping in India. However, challenges such as computer illiteracy, concerns about risk and privacy, and lack of physical presence and interactivity still exist. Online shopping market in Indian scenario is seeing enormous growth now a days. The country's internet user base has been expanding, driven by increased technological Proliferation, internet and mobile penetration, and the availability of low-cost smartphone (Prateek, 2016). The e-commerce industry in India has been behind its counterparts in developed and emerging economies due to a relatively low internet user base, but the favorable ecosystem created by these factors presents opportunities for future growth and development (Madhurima, 2017) (Gangeshwer. (2013). The growth of e-commerce in India has been categorized into different types, including business-to-business (B2B) and business-to-customer (B2C) (Uttiya, 2016). Factors contributing to the increased use of online shopping in India include convenience, easy access to products and information, and enjoyment for customers . However, there are also hurdles to online shopping, such as computer illiteracy, concerns about risk and privacy, and lack of physical presence and interactivity . Overall, the literature suggests that online shopping in India is on the rise, with potential for further growth and development in the future (Hossen et al., 2026).

Online shopping in the Indian context faces several challenges. One of the challenges is the need to understand the lifestyles of online shoppers for segmentation, targeting, and promotions . Another challenge is the low self-efficacy of Indian consumers in using the internet for shopping, as well as their perception that online shopping is eccentric (Sakshi, 2017) (Monika, 2013). Additionally, there is a need to develop appropriate scales applicable in the Indian context to understand the factors that influence Indian online shoppers' lifestyles or e-lifestyles (Shweta, 2014) . Furthermore, there is a need to overcome the obstacles of low customer perception and fear of using new technology in the initial stages of online shopping (Anand, 2017) . Finally, there is a need for e-commerce companies to address specific challenges such as free door-to-door shipping in all areas, quick service for electronic goods, and the applicability of cash on delivery for all areas, not just metros (Ashok. (2021)

Research on online shopping and purchase intention has identified several gaps in the existing literature. One gap is the lack of research on whether the hierarchy of effects between online store beliefs, consumer online affective states, and purchase intentions differs across different product types (Tibert, 2018). Another gap is the need to empirically verify the precise effect of online shopping context and perceived value on consumers' cross-border online purchase intention (Liang, 2019). Additionally, there is a scarcity of empirical studies investigating the factors that explain online repurchase intention, despite the growing importance of e-commerce for business success (Ana, 2017). Furthermore, there is limited understanding of how trust and shopping enjoyment affect online purchase intention, particularly in the context of social media and e-commerce convergence (Hao, 2014). Finally, there is a need to investigate the underlying factors for online purchase behavior, including the interactional role of gender and product category (Shivraj, 2004).

Security risk and online shopping

Security risk is an important factor influencing online purchase intention (Tibert, 2018). The study by Torres found that security is one of the dimensions representing satisfaction with the internet purchase experience and is a driver of consumer satisfaction with online purchase experience (Liang, 2019). Additionally, the study by Kannungo and Jain found that perceived risk has a relationship with intention to purchase, and this relationship is moderated by the interaction of gender and product category (Ana, 2017). Therefore, the presence of security risks can impact consumers' intention to purchase online (Mohd Pauzi & Shahadat Hossen, 2025).

Privacy risk in online shopping has been a significant concern in the literature. Several studies have highlighted the importance of privacy and security concerns in influencing consumer behavior and attitudes towards online shopping (Hannah, 2017) These concerns include perceived risk, privacy concerns, and security threats that consumers may face during the e-shopping process (Jesus, 2015) . It has been argued that protecting individual stages of the e-shopping process is not enough, and a comprehensive solution is needed to address privacy risks throughout the entire process (Ilmudeen, 2019) . Additionally, factors such as risk perceptions, benefit perceptions,

familiarity, reputation, privacy policy, and trust have been found to mitigate privacy concerns and affect customer attitudes and usage of e-commerce platforms (Shweta, 2014). The literature also emphasizes the need for businesses to effectively address customers' privacy concerns to ensure the growth of e-commerce (Haroon, 2021).

Privacy in online shopping and purchase intention

Innovation in online shopping has led to increased convenience for customers and increased sales for merchants (Hannah, 2017). However, it has also raised concerns about privacy and security (Jesus, 2015). These concerns include threats to privacy throughout the e-shopping process, as well as perceived security risks in online shopping (Rodriguez., 2015) (Ilmudeen, 2019). Research has shown that privacy concerns can affect customer attitudes and usage of e-commerce platforms. The growth of e-commerce and technological advancements have intensified privacy issues, leading to a surge in research on consumer privacy in business to consumer e-commerce. Overall, there is a need for comprehensive understanding of privacy dynamics in e-commerce and effective strategies to address customer privacy concerns (Ruwan, 2020).

Perceived ease of use

Perceived ease of use is an important factor in online shopping reviews. Several studies have examined the influence of perceived ease of use on consumer attitudes and intentions towards online shopping. The Technology Acceptance Model (TAM) is often used to measure perceived ease of use and its impact on consumer behavior. For example, Dhingra and Mudgal found that perceived ease of use significantly influenced consumers' attitudes and intentions towards adopting various technologies, including online shopping (Jonna, 2004). Similarly, Renny et al. found that perceived ease of use had a significant positive effect on attitudes towards the usability of online ticket reservation systems (Manish, 2019). However, Järveläinen and Järveläinen noted that the standard items used to measure perceived ease of use in the TAM may not fully capture the unique features and challenges of online shopping, such as evaluating improvement in productivity and performance. Therefore, while perceived ease of use is an important factor in online shopping reviews, it is crucial to consider the specific context and measurement items used in each study. Perceived ease of use is an important factor in influencing consumer attitudes and intentions towards the adoption of technology, including online shopping and the use of internet services (Jonna, 2004) (Manish, 2019). Several studies have examined the relationship between perceived ease of use and purchase intention in various contexts. For example, one study found that perceived ease of use had a significant positive effect on customer attitude towards purchasing online from the App Store (Steven, 2015). Another study found that perceived ease of use did not have a significant effect on consumer purchasing decisions for online fashion products, while perceived usefulness and trust were found to be significant factors^[4]. These findings suggest that the impact of perceived ease of use on purchase intention may vary depending on the specific context and product being studied (Hossen et al., 2023).

Perceived usefulness and purchase intention

Perceived usefulness of online reviews has a positive and significant effect on purchase intention (Heesook, 2018). Consumers' positive perceptions of the usefulness of reviews increase their reading activity and subsequently their purchase intentions (Nadzima, 2021). The perceived usefulness of online reviews is correlated with factors such as review credibility, review depth, reviewer trustworthiness, and reviewer expertise (Zhangxiang, 2021). Additionally, the perceived value and perceived usefulness of online reviews mediate the influence of endorser credibility on purchase intention (Dyajeng, 2020). Trust and perceived risk also impact online purchase intention, along with perceived usefulness of online reviews (Ivan, 2020). Overall, the perceived usefulness of online reviews plays a crucial role in shaping consumers' purchase intentions, and factors such as review credibility, reviewer expertise, and perceived value further influence this relationship (Rashed et al., 2025).

Attitude as a mediator

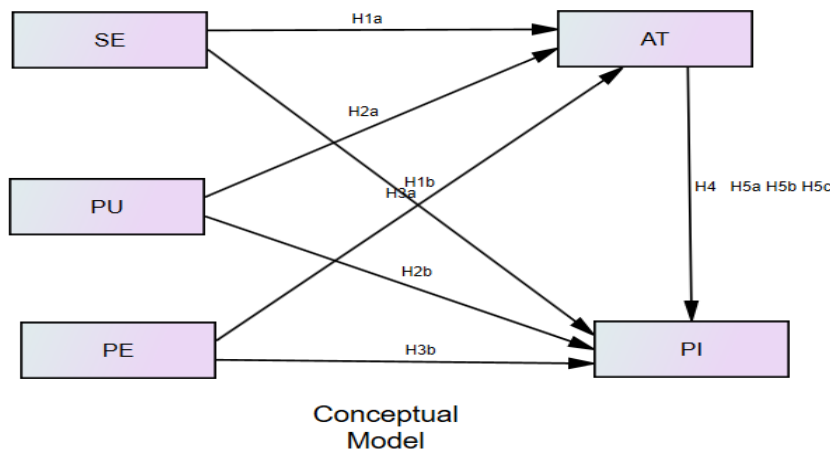
Attitude plays a significant role as a mediator in online purchase intention (Prerna, 2018) (Lim, 2015) (Monica, 2016). It has been found to have a full mediation effect on purchase intention for "Halal" branded products . In the context of online shopping, attitude has been identified as a determinant of purchase intention among university students . Additionally, attitude towards halal cosmetics has been found to mediate the relationship between various drivers of electronic word of mouth (eWOM) and purchase intention . Attitude towards brands has also been found to partially mediate the relationship between customer lifestyle, customer personality, and online purchase behavior . These findings highlight the importance of attitude in shaping consumers' intentions to make online purchases. (Anubha. (2021) (Hafiza, 2018)

Research methodology

The relationship of security/privacy concern, perceived usefulness & perceived ease of use on online shopping behaviour while mediated by attitude was investigated. The quantitative survey method was conducted by distributing the questionnaires to the middle-aged employees working in various public and private companies situated in south India (Rahman et al., 2025).

Conceptual Model

This study aims to reassess the online purchase intention model by integrating TAM with attitude as a mediating construct. The sampling included middle aged from 21-45 as respondents with high purchasing capacity. The independent constructs are Security concern, perceived ease of use, perceived usefulness with attitude as a mediating variable towards determining the purchase intention of online purchasers. In total there are 10 hypothesis examine various impacts. Many researchers have illustrated that attitude is used for predicting the behavioural intention hence being used as a mediator. (Aritonang R, 2015)



- H1a: Personal awareness of security is positively related to online purchase intention
- H1b: Personal awareness of security is positively related to attitude towards online purchase
- H2a: Perceived ease of purchasing is positively related to online purchase intention
- H2b: Perceived ease of purchasing is positively related to attitude toward online purchase
- H3a: Perceived usefulness is positively related to online purchase intention
- H3b: Perceived usefulness is positively related to attitude toward online purchase
- H4: Attitude toward online purchase is positively related to online purchase intention
- H5a: Attitude toward online purchase mediates the relationship between personal awareness of security and online purchase intention
- H5b: Attitude toward online purchase mediates the relationship between perceived ease of purchasing and online purchase intention
- H5c: Attitude toward online purchase mediates the relationship between perceived usefulness and online purchase intention

4. Methodology

4.1. Sampling and procedure

The sample for this study was composed of middle aged 21–45 years of age, located in the cities of south India.

Table 1 :Demographic characteristics

		Count	Column N %
Age	21-30	62	41.3%
	31-45	88	58.7%
Gender	Male	112	74.7%
	Female	38	25.3%
Education	UG level	79	52.7%
	PG level	29	19.3%
	Others	42	28.0%
Income	below 30000	64	42.7%
	30001 - 60000	43	28.7%
	above 60000	43	28.7%
Experience	below 5 years	64	42.7%
	6-10	59	39.3%
	above 10 years	27	18.0%

The sample included 112 males (74.7%) and 38 females (25.3%) whereas 62 (41.30%) were aged 21 -30, 88 (58.70%) were aged 31–45. 64(42.70%) had the personal monthly income below HK \$15,000 and 64 42.70%) got the income level below 30000, 79 (52.70%) had completed UG level of education and 64 (42.70%) had experience level of below 5 years.

Factor analysis

The Bartlett test of sphericity and Kaiser-Meyer-Olkin (KMO) were used. In this study, the value of 0.816 was obtained from the test of KMO with a significant value $p < 0.001$. These illustrated that the data set in this research was adequate for factor analysis. Second, in order to identify the underlying structure of data relationships, principal component analysis was used and factors were extracted based on eigenvalues greater than 1. Five constructs were found. The factor loadings of the variables were then evaluated. Afterwards, five constructs used in this research were composed primarily of their related variables. The total variance explained of these seven constructs was 64.55%.

Table 2 : KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.816
Bartlett's Test of Sphericity	Approx. Chi-Square	2056.72
	df	300
	Sig.	.000

Rotated Component Matrix^a

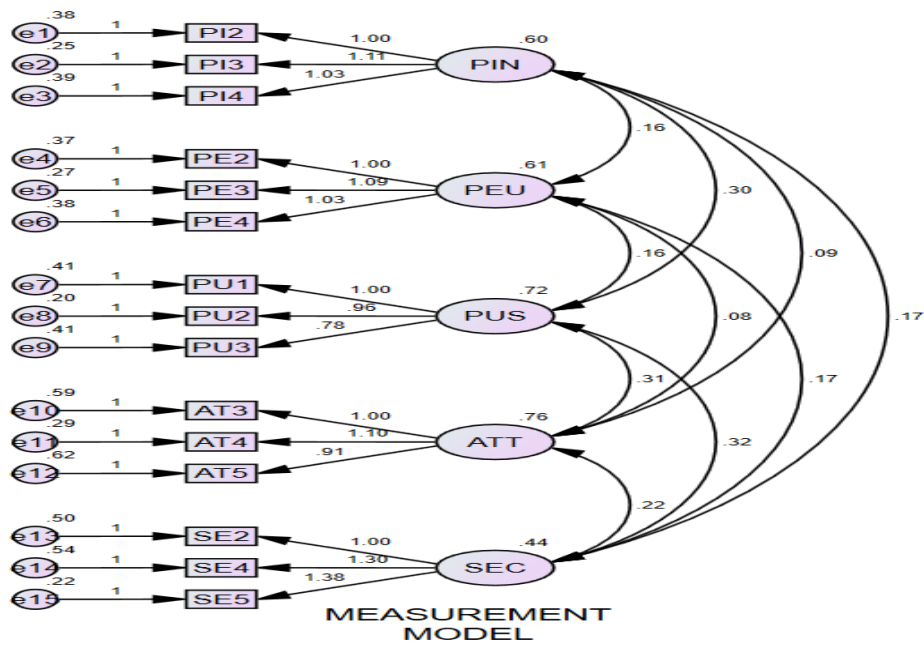
	Component				
	1	2	3	4	5
SE2					.772
SE4					.824
SE5					.827
PU1			.828		
PU2			.830		
PU3			.789		
AT3				.786	
AT4				.860	
AT5				.838	
PI2	.847				
PI3	.864				
PI4	.840				
PE2		.869			
PE3		.879			
PE4		.845			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Evaluation of Measurement Model



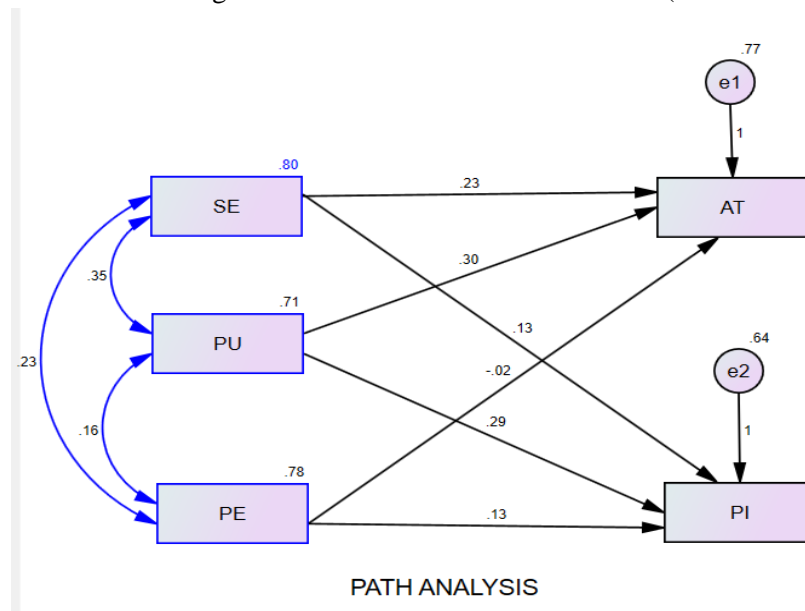
Model fit of Measurement Model

In order to assess the adequacy of the measurement model, the evaluation of component loadings of the items for each measure, and the tests for reliability, convergent validity and discriminant validity of the constructs were performed. All the factor loading measures of the 15 items were above 0.70 and AVE of each construct was greater than 0.50, thus meeting the recommended criteria for convergent validity (Hair, 2011). It also meant that the measurement model possessed adequate convergent validity. As shown in Table 4, the reliability measures of all the constructs exceeded 0.70, which met the suggested criteria (Nunnally, 1978). This also indicates that the measurement model possessed good internal consistency reliability. Table 2 summarizes these findings.

Table 3: Quality criteria of the constructs convergent and discriminant Validity

	CR	AVE	MSV	MaxR(H)	PIN	PEU	PUS	ATT	SEC
PIN	0.853	0.660	0.200	0.861	0.812				
PEU	0.854	0.661	0.111	0.858	0.262**	0.813			
PUS	0.842	0.642	0.316	0.861	0.447***	0.239*	0.801		
ATT	0.821	0.606	0.176	0.844	0.137	0.117	0.420***	0.779	
SEC	0.825	0.613	0.316	0.859	0.336**	0.334**	0.562***	0.377***	0.783

Discriminant validity was assessed by the examination of cross loadings of the indicators and Fornell-Larcker criterion (Fornell, 1981). First, if the item’s factor loadings on its construct is higher than all of its cross loadings with other constructs, this provides support to discriminant validity. Table 4 shows the square root of AVE of each construct, which is higher than their inter-construct correlations. Hence, this measurement model illustrates adequate discriminant validity. The measurement model illustrates adequate discriminant validity based on the factor loadings of the indicators and the Fornell-Larcker criterion. The measure of each item related to the construct it attempted to reflect and did not have stronger connection with another construct (Hossen & Pauzi, 2025).



Mediation analysis

In this study, ATT was the mediator, and the mediation test was performed with bootstrapping. There was no significant mediation effect on all the three paths.. ATT did not have any mediation effect on the path between SEC => PI, PEU=>PI or PU=>. The results are depicted in Table 5. In summary, among all the 10 hypotheses, only 6 were supported paths; The results obtained thus, are summarized in Table 5.

Table 4: Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P	Label
AT	<--- SE	.227	.093	2.444	.002	par_1
AT	<--- PU	.303	.096	3.145	.002	par_2
AT	<--- PE	-.023	.086	-.267	.789	par_8
PI	<--- PU	.287	.091	3.160	.002	par_3
PI	<--- PE	.126	.078	1.607	.005	par_4
PI	<--- SE	.125	.086	1.456	.005	par_9
PI	<--- AT	.026	.075	.342	.002	par_10

Table 5: Mediation summary

Hypothesis	Path	Direct Effect	Indirect Effect	Remark
H5a	SEC=>ATT=>PI	.125 ***	.006 n. s	No effect
H5b	PEU=>ATT=>PI	.126 ***	-.001 n. s	No affect
H5c	PU=>ATT=>PI	.287 ***	.008 n. s	No affect

Table 6: SUMMARY OF HYPOTHESIS TESTING

SEC=> PI	Supported
PEU=>PI	Supported
PU=> PI	Supported
AT=>PI	Supported
SE=>ATT=>PI	Unsupported
PEU=>ATT=>PI	Unsupported
PU=>ATT=>PI	Unsupported
SEC=>ATT	Unsupported
PEU=>ATT	Supported

PU=> ATT	Supported
----------	-----------

From table 7 it can be summarized that among all the 10 hypotheses, only 6 were supported and the rest of the hypothesis were not supported. This study assessed the existing online purchase intention model through middle aged respondents, and illustrates that the mediator attitude has no effect on online purchase intention. The independent constructs like Security/privacy, perceived usefulness and perceived ease of use having significant relationship with the purchase intention. This study shows that attitude is not mediating between independent constructs and dependent constructs.

Findings on the mediators

The findings demonstrate that attitude is not a mediator between the predictors and purchase intention. (Azaze-Azizi, 2013) found that attitude is not mediating online purchase intention.

Middle-aged users who use electronic devices perceive that security, perceived ease of use and perceived usefulness are the most significant factors in doing purchase online. Furthermore, Perceived usefulness is the most significant factor followed by security and privacy of transaction

Practical implications

Online marketers should focus on finding middle-aged online users who see themselves as being innovative and capable to surf online. They can cooperate with different communication and social media companies to build positive attitude and strengthen their habitual online usage. Middle-aged online users may not want to put much effort into processing online purchases and some may want to visit to some web pages and e-shops with strong security and privacy platforms.

Conclusion

This study focussed on only a small group of respondents of around 150 only, that too focussed on a small geographic area in South India. We employed convenient sampling technique which can be replaced by cluster or stratified sampling to generate higher statistical inference for generalization. Further research may include various demographic characteristic and various mediators to get effective results.

Funding: The research did not receive financial assistance from any funding entity.

Conflicts of Interest: The author has no conflicts of interest to disclose concerning this study.

Declarations: This manuscript has not been published to any other journal or online sources.

Data Availability: The author has all the data employed in this research and is open to sharing it upon reasonable request.

REFERENCES

- Adis, Azaze-Azizi & Jun, Kim. (2013). Antecedents of Brand Recall and Brand Attitude towards Purchase Intention in advergames. *European Journal of Business and Management*. 18. 12.
- Anand, Vyas., Sachin, Gupta. (2017). Challenges Assessment for the E-Commerce Industry in India: A Review (With Special Reference to Flipkart V/S Snapdeal). *Journal of Global Information Management*, 25(4):16-31.
- Ana, Torres. (2017). The Impact of e-Shopping Satisfaction Factors in Repeat Purchase Intention on Internet.

- Anubha. (2021). Mediating role of attitude in halal cosmetics purchase intention: an ELM perspective. *Journal of Islamic Marketing*,
- Ashok P. (2021). Gender and Behaviour Differences Influencing on Web Shopping. *Management Science*, 8(4):54-59.
- Dyajeng, Puteri, Woro, Subagio., Dwita, Laksmi, Rachmawati. (2020). Pengaruh Endorser terhadap Purchase Intention dengan Perceived Value dan Perceived Usefulness sebagai
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gangeshwer (2013) E-Commerce or Internet Marketing: A Business Review from Indian Context. *International Journal of u- and e- Service*, 2013)
- Hafiza, Sobia, Tufail., Asad, Afzal, Humayon., Jawad, Shahid., Gulam, Murtza., Rabia, Luqman., Hudda, Riaz. (2018). Impact of Life Style and Personality on Online Purchase Intentions of Internal Auditors through Attitude towards Brands. 7:72-83.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) *Multivariate Data Analysis*. 7th Edition, Pearson, New York.
- Hao, Suan., Samuel, Lee., Kok, Wei, Khong., Jer, Lang, Hong. (2014). Influence of Online Shopping Enjoyment and Trust Towards Purchase Intention in Social Commerce Sites. 1:1-98.
- Hannah, Marriott., Michael, D., Williams., Yogesh, K., Dwivedi. (2017). Risk, privacy and security concerns in digital retail. *The Marketing Review*, 17(3):337-365.
- Haroon, Iqbal, Maseeh., Charles, Jebarajakirthy., Robin, Pentecost., Denni, Arli., Scott, Keith, W, Weaven., Md., Ashaduzzaman. (2021). Privacy concerns in e-commerce: A multilevel meta-analysis. *Psychology & Marketing*, 38(10):1779-1798.
- Heesook, Hong., Hye-Shin, Kim., Sharron, J., Lennon. (2018). The Effects of Perceived Quality and Usefulness of Consumer Reviews on Review Reading and Purchase Intention. *The Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior*, 31:71-89.
- Ilmudeen, Aboobucker. (2019). Consumers' Perceived Security Risks in Online Shopping : A Survey Study in Sri Lanka. *Social Science Research Network*,
- Ivan, Ventre., Diana, Kolbe. (2020). The Impact of Perceived Usefulness of Online Reviews, Trust and Perceived Risk on Online Purchase Intention in Emerging Markets: A Mexican Perspective. *Journal of International Consumer Marketing*, 32(4):287-299.
- Monica, Law., Ron, Chi-Wai, Kwok., Mark, Ng. (2016). An extended online purchase intention model for middle-aged online users. *Electronic Commerce Research and Applications*, 20:132-146.
- Nadzima, Afifah. (2021). Understanding the Effect of Review Credibility, Perceived Usefulness, and Perceived Ease of Use towards Purchase Intention (A Study on K-Beauty Products in Shopee). 10(1)
- R., Aritonang, R, Lerbin. (2015). Attitude as a Mediator between Cognitive Dissonance and Intention to Repurchase a Product. *Mediterranean journal of social sciences*, 6(5):133-133.
- Ruwan, Bandara., Mario, Fernando., Shahriar, Akter. (2020). Privacy concerns in E-commerce: A taxonomy and a future research agenda. *Electronic Markets*, 30(3):629-647.
- Hossen, M. S., Pauzi, H. B. M., & Salleh, S. F. B. (2023). Enhancing Elderly Well-being Through Age-Friendly Community, Social Engagement and Social Support. *American J Sci Edu Re: AJSER*-135.

- Hossen, M. S., & Pauzi, H. M. (2025). Synthesis of Psychological Wellbeing of the Elderly Individuals Literature Using Bibliometric Analysis. *Pertanika Journal of Social Sciences & Humanities*, 33(3).
- Hossen, M. S., Pauzi, H. M., Islam, M. S., & Salleh, S. F. (2026). ELDERLY LIFE SATISFACTION THROUGH SOCIAL INTERACTION AND FORMAL CARE CENTER MANAGEMENT. *Asian People Journal (APJ)*, 9(1), 1–15.
- Mohd Pauzi, H., & Shahadat Hossen, M. (2025). Comprehensive bibliometric integration of formal social support literature for elderly individuals. *Housing, Care and Support*, 1–17.
- Rahman, M. K., Hossain, M. A., Ismail, N. A., Hossen, M. S., & Sultana, M. (2025). Determinants of students' adoption of AI chatbots in higher education: the moderating role of tech readiness. *Interactive Technology and Smart Education*.
- Rashed, M., Jamadar, Y., Hossen, M. S., Islam, M. F., Thakur, O. A., & Uddin, M. K. (2025). Sustainability catalysts and green growth: Triangulating evidence from EU countries using panel data, MMQR, and CCEMG. *Green Technologies and Sustainability*, 100305.



This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium upon the work for non-commercial, provided the original work is properly cited.