



A Study On Consumer Education Towards External Stimuli Affecting Online Shopping Behavior – Analysis Using Jamovi

Mariyappan N^{1*}, Sangeetha G¹

¹Department of Commerce, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, TamilNadu, India 603202

*Corresponding Author: Mariyappan N
Mail ID: baelukapoor@gmail.com

Citation: Mariyappan N et al. (2024). A Study On Consumer Education Towards External Stimuli Affecting Online Shopping Behavior – Analysis Using Jamovi, *Educational Administration: Theory and Practice*, 30(4), 5985-5991, Doi: 10.53555/kuey.v30i4.1922

ARTICLE INFO

ABSTRACT

This research explores how external cues, including economic, social, political, technological, and cultural factors, influence consumer purchasing decisions on the internet. Using a mixed-method research strategy, it examines the theoretical underpinnings and empirical data on the influence of external stimuli on internet shopping behavior. The findings can help internet merchants and marketers create successful marketing campaigns, enhance user experience, and strengthen customer bonds. To ensure representation across all demographics and buying inclinations, a varied sample of online consumers is gathered. Advanced statistical approaches are used in the data analysis to find patterns, trends, and connections between environmental factors and consumer purchasing behaviours.

Keywords: *Consumer, Internet, Technology, External Cues, Cultural*

Introduction

The introduction of the electronic world has changed how consumers engage with companies, especially while buying. Online shopping has become a powerful force in the retail sector, providing consumers with convenience, accessibility, and a variety of options. As a result, companies are always looking for new methods to comprehend and affect consumers' online purchasing decisions. The influence of outside cues on consumer decision-making is an important topic that has received a lot of research. The wide range of things that are not immediately cognizant of a person but have the potential to affect their perceptions, emotions, and ultimately, their purchase choices are referred to as external stimuli. These triggers include a wide variety of factors in the context of online buying, including political, economic, cultural, social, and technological aspects. In the digital age, when consumers are continually exposed to a torrent of information, suggestions, and persuading messages from many sources, the effect of external stimuli has become even more apparent. Businesses aiming to improve their marketing tactics and online presence must comprehend how external factors affect customer purchasing behavior. To successfully engage the audience, they are targeting and increase sales, marketers and online merchants need to understand how these stimuli affect consumers' attitudes, preferences, and behavior.

Objectives of the study

1. To know the demographic determinants of the respondents
2. To educate the consumer towards the online shopping
3. To the impact of external stimuli on consumer buying satisfaction

Review of Literature

Numerous research has looked at how digital advertising affects customer purchasing decisions when they purchase online. Smith et al.'s (2017) study discovered a strong influence of personalized and targeted adverts on consumers' purchasing intentions. Additionally, Dwivedi (2021) noted that consumers are more likely to interact with online advertisements that elicit emotional reactions, increasing the possibility that they would make a purchase. The mechanics of internet buying have changed dramatically with the introduction of social

Copyright © 2024 by Author/s and Licensed by Kuey. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

media platforms. Kim and Ko (2012) looked at how social media influences consumers' purchasing decisions and discovered that peer and influencer recommendations have a big effect on purchases. Furthermore, Almohaimmed (2019) showed that customer purchase intentions are strongly influenced by the degree of participation with social media material. Studies that took cultural differences into account examined how external cues affected consumer behavior. In their comparative research of Chinese and American consumers, Han and Kim (2018) discovered that cultural values have a big impact on how people react to online marketing and product suggestions.

Scope of the Study

1. Chengalpattu district only have been focused in this research
2. Percentage analysis, normality test, correlation was used in this research paper
3. Political, Economic, Technology, Social and Cultural only have been adopted as independent factors for this research

Limitation of the Study

1. This research is focused only on residents of the Chengalpattu. Hence, generalization to a large population is challenging
2. Time factor is major constraint

Consumer Education on Online Shopping

Consumer education towards online shopping is crucial in today's digital age where more and more people are turning to the internet to make purchases. Here are some key points to consider when educating consumers about online shopping:

- **Understanding Online Security:** Consumers need to be aware of the importance of secure transactions online. This includes using secure websites (look for "https://" in the URL), avoiding public Wi-Fi for financial transactions, and regularly updating antivirus software.
- **Recognizing Phishing Scams:** Consumers should be educated about phishing scams, where fraudulent emails or websites mimic legitimate ones to steal personal information. They should know how to recognize and avoid these scams, such as by checking the sender's email address and being cautious of unsolicited requests for personal information.
- **Reading Reviews and Ratings:** Encourage consumers to read reviews and ratings of products and sellers before making a purchase. This can help them make informed decisions and avoid scams or low-quality products.
- **Comparing Prices and Policies:** Teach consumers to compare prices and shipping policies across different websites before making a purchase. They should also review return and refund policies to ensure they understand their rights as consumers.
- **Protecting Personal Information:** Consumers should understand the importance of protecting their personal and financial information online. This includes using strong, unique passwords for each online account and being cautious about sharing sensitive information.
- **Checking for Secure Payment Options:** Emphasize the importance of using secure payment options, such as credit cards with fraud protection or reputable third-party payment processors like PayPal. Consumers should avoid sharing their credit card information directly with unfamiliar or unsecured websites.
- **Understanding Delivery and Shipping:** Educate consumers about delivery times, shipping costs, and tracking options for online purchases. They should also be aware of customs duties or taxes that may apply to international shipments.
- **Being Wary of Deals that Seem Too Good to Be True:** Remind consumers to be cautious of deals or offers that seem too good to be true, as they may be scams. Encourage them to research the seller and product thoroughly before making a purchase.
- **Knowing Their Rights:** Consumers should know their rights when shopping online, including their right to cancel an order, return a product, or dispute unauthorized charges. Provide information about consumer protection laws and resources for resolving disputes.
- **Staying Informed About Online Shopping Trends and Risks:** Finally, encourage consumers to stay informed about the latest trends and risks in online shopping. This includes staying up-to-date on common scams and security threats, as well as new technologies and tools for protecting themselves while shopping online.

Statement of Problem

The fast expansion of internet shopping in the digital era has changed the consumer environment and given consumers access to goods, services, and information like never before. Consumers are continually exposed to a wide range of external stimuli due to the expansion of online platforms, including digital advertising (technological), social media content (social), cultural, political, and economic factors. These factors have the potential to have a big impact on how satisfied consumers are with their online buying experience.

However, despite the growing importance of outside factors in influencing customer purchasing decisions in the context of online shopping, there is still a need to thoroughly research and comprehend their effects. The current study examines the following important research issues in an effort to close this knowledge gap:

1. What kinds of outside cues are common while purchasing online, and how do they affect buyer behavior?
2. What are the consequences for companies, advertisers, and policymakers in the realm of online purchasing of recognizing the influence of external stimuli on customer behavior?

Research Methodology

A judgmental sampling method was used to get 130 samples for this study. Both primary and secondary sources are used in this research study. However, a large portion of the primary data utilised in this study was gathered by administering questionnaires to a number of consumers who lived in the Chennai area. The data analysis programme utilised was JAMOVI Software. In this study, research methods including the normalcy test, multiple correlation were applied.

Table 1 Demographic profiles of the respondents

Demographics	Options	Percent
Gender	Male	60.8
	Female	39.2
Age	13 – 20	20.4
	21 – 25	37.8
	26 – 36	28.6
	37 and above	13.2
Educational Qualification	SSLC / HSC	12.6
	UG	42.4
	PG	21.6
	Professional Degree	23.4
Income	Below 20000	19.4
	20000 – 40000	48.8
	40000 and above	31.8

Primary Source,

According to Table 1, the majority of respondents (30.4%) were male (60.8%), between the ages of 21 and 25, and had an undergraduate degree (42.4%). 48.8% of responders, or the majority, fell within the 20 000–40 000 range.

Reliability Test

❖ The reliability test is conducted to evaluate the validity of the questionnaire and the item's internal consistency. The Cronbach's alpha should be excellent if it is more than 0.05, according to the criterion. This survey's Cronbach's alpha score of 0.842 demonstrates its validity and accuracy. As a result, further analysis on the gathered data is possible (Table 2). Moreover (Table 3), Internal consistency is usually considered acceptable if the estimated coefficient is 0.70 or higher for the McDonald's Omega coefficient^{1,2}.

¹ McNeish D. Thanks coefficient alpha, we'll take it from here. *Psychol Methods*. 2018 Sep;23(3):412-433. doi: 10.1037/met0000144. Epub 2017 May 29. PMID: 28557467.

²Kenneth Stensen, Stian Lydersen (2023), Internal consistency: from alpha to omega?, retrieved from <https://tidsskriftet.no/en/2022/08/medicine-and-numbers/internal-consistency-alpha-omega>

Table 2
Reliability Analysis

Scale Reliability Statistics				
	Mean	SD	Cronbach's α	McDonald's ω
scale	4.56	0.649	0.842	0.876

[3]

Item Reliability Statistics				
	Mean	SD	If item dropped	
			Cronbach's α	McDonald's ω
satisfaction	4.69	0.686	0.801	0.845
Political	4.65	0.731	0.787	0.830
Economic	4.70	0.624	0.804	0.846
Technology	4.08	1.281	0.850	0.854
Cultural	4.69	0.628	0.821	0.871

Correlation Heatmap

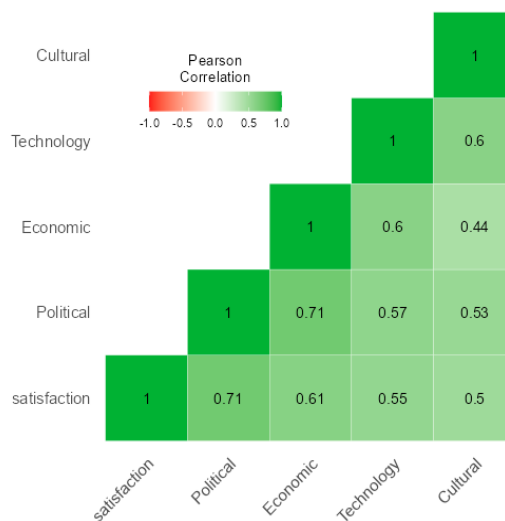


Table 3 Normality Test
Descriptives

	N	Shapiro-Wilk	
		W	p
Satisfaction	80	0.514	< .001
Political	80	0.531	< .001
Economic	80	0.524	< .001
Technology	80	0.704	< .001
Cultural	80	0.541	< .001
Social	80	0.736	< .001

Interpretation for Normality test

As calculated Shapiro – Wilk probability value of all factors is less than 0.001, the data are not normally distributed (Table 3).

Hypothesis

H_0 = The satisfaction level of male and female are not same towards online shopping

H_1 = The satisfaction level of male and female are same towards online shopping

Mann – Whitney U Test

Table 4

Ranks				
	Gender	N	Mean Rank	Sum of Ranks
Satisfaction	1	46	41.75	1920.50
	2	34	38.81	1319.50
	Total	80		

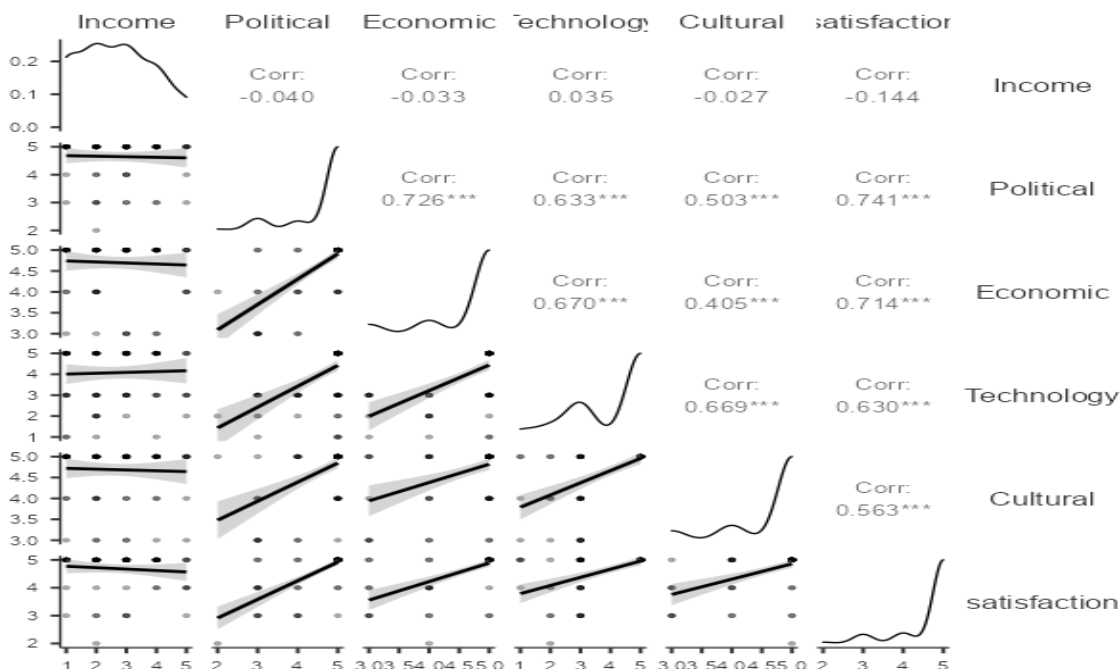
Table 5

Test Statistics ^a	
	satisfaction
Mann-Whitney U	724.500
Wilcoxon W	1319.500
Z	-.802
Asymp. Sig. (2-tailed)	.422
a. Grouping Variable: Gender	

Interpretation

The significant value 0.422 is more than the 0.05 at 5% significant level. Hence, Null Hypothesis is accepted and Alternative hypothesis is rejected. So, the level of satisfaction of female and male are not same in the context of online shopping.

Spearman rank Correlation Plot



Interpretation

Except Income of the Consumer, all variables are having relationship with each other, because of significant value are less than 0.05. The significant value of Income is more than 0.05 at 5% level. Hence, the null hypothesis is accepted and alternative hypothesis rejected. So, there is no relationship with income of the consumer and other factors namely, political factor, economic factor, technology factor, cultural factor and level of satisfaction.

Conclusion

To sum up, online businesses need to understand the importance of understanding and strategically using external stimuli to positively impact consumer behaviour. While the digital environment offers unique marketing opportunities and personalized experiences, it also requires a multi-faceted approach to overcome the challenges of information overload and changing consumer preferences. By staying on top of the ever-changing dynamic of external stimuli, online businesses can improve their online presence, create trust, and deliver a more engaging and rewarding shopping experience. As technology advances and online platforms change, continuous research and agility will be essential to remain ahead of the curve in this ever-changing landscape of online consumer behaviour.

Reference

1. Smith EN, Romero C, Donovan B, Herter R, Paunesku D, Cohen GL, Dweck CS, Gross JJ. Emotion theories and adolescent well-being: Results of an online intervention. *Emotion*. 2018 Sep;18(6):781-788. doi: 10.1037/em0000379. Epub 2017 Dec 21. PMID: 29265838.
2. Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., ... & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168.
3. Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business research*, 65(10), 1480-1486.
4. Almohaimmed, B. M. (2019). The effects of social media marketing antecedents on social media marketing, brand loyalty and purchase intention: A customer perspective. *Journal of Business and Retail Management Research*, 13(4).

5. Han, M. C., & Kim, Y. (2018). How culture and friends affect acceptance of social media commerce and purchase intentions: A comparative study of consumers in the US and China. *Journal of International Consumer Marketing*, 30(5), 326-335.
6. Liang, Y. P. (2012). The relationship between consumer product involvement, product knowledge and impulsive buying behavior. *Procedia-Social and Behavioral Sciences*, 57, 325-330. <https://doi.org/10.1016/j.sbspro.2012.09.1193>
7. Hand, C., Dall'Olmo Riley, F., Harris, P., Singh, J., & Rettie, R. (2009). Online grocery shopping: the influence of situational factors. *European journal of Marketing*, 43(9/10), 1205-1219. <https://doi.org/10.1108/03090560910976447>
8. Goode, M.M.H. and Harris, L.C. (2007), "Online behavioural intentions: an empirical investigation of antecedents and moderators", *European Journal of Marketing*, Vol. 41 No. 5/6, pp. 512-536. <https://doi.org/10.1108/03090560710737589>
9. Alfuqaha, O. A., Dua'a, A. A., Al Thaher, Y., & Alhalaiqa, F. N. (2022). Measuring a panic buying behavior: the role of awareness, demographic factors, development, and verification. *Heliyon*, 8(5), e09372. <https://doi.org/10.1016/j.heliyon.2022.e09372>
10. Fernandes, M., Walter, A. Publication Behavior in Different Fields of Business Administration: From Anecdotal to Empirical Evidence. *Schmalenbach J Bus Res* 74, 265–306 (2022). <https://doi.org/10.1007/s41471-022-00137-9>
11. Akbari, K., Wagner, U. Playing When Paying and What Happens Next: Customer Satisfaction and Word-of-Mouth Intention in Gambled Price Promotions. *Schmalenbach J Bus Res* 73, 243–271 (2021). <https://doi.org/10.1007/s41471-021-00110-y>
12. Wäldchen, D., Glas, A.H. & Essig, M. Choice Behavior in Innovation Exchange Between Buyers and Sellers. *Schmalenbach J Bus Res* 73, 273–305 (2021). <https://doi.org/10.1007/s41471-021-00113-9>
13. Sorce, P., Perotti, V. and Widrick, S. (2005), "Attitude and age differences in online buying", *International Journal of Retail & Distribution Management*, Vol. 33 No. 2, pp. 122-132. <https://doi.org/10.1108/09590550510581458>
14. Laohapensang, O. (2009), "Factors influencing internet shopping behaviour: a survey of consumers in Thailand", *Journal of Fashion Marketing and Management*, Vol. 13 No. 4, pp. 501-513. <https://doi.org/10.1108/13612020910991367>
15. Vazquez, D. and Xu, X. (2009), "Investigating linkages between online purchase behaviour variables", *International Journal of Retail & Distribution Management*, Vol. 37 No. 5, pp. 408-419. <https://doi.org/10.1108/09590550910954900>
16. Baidoun, S.D. and Salem, M.Z. (2023), "The moderating role of perceived trust and perceived value on online shopping behavioral intention of Palestinian millennials during COVID-19", *Competitiveness Review*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/CR-10-2022-0161>
17. Ligaraba, N., Nyagadza, B., Dörfling, D. and Zulu, Q.M. (2022), "Factors influencing re-usage intention of online and mobile grocery shopping amongst young adults in South Africa", *Arab Gulf Journal of Scientific Research*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/AGJSR-06-2022-0088>
18. Poon, W.C. and Tung, S.E.H. (2022), "The rise of online food delivery culture during the COVID-19 pandemic: an analysis of intention and its associated risk", *European Journal of Management and Business Economics*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/EJMBE-04-2021-0128>
19. Ong, A. K. S., Dejucos, M. J. R., Rivera, M. A. F., Muñoz, J. V. D., Obed, M. S., & Robas, K. P. E. (2022). Utilizing SEM-RFC to predict factors affecting online shopping cart abandonment during the COVID-19 pandemic. *Heliyon*, 8(11), e11293. <https://doi.org/10.1016/j.heliyon.2022.e11293>
20. Adibfar, A., Gulhare, S., Srinivasan, S., & Costin, A. (2022). Analysis and modeling of changes in online shopping behavior due to COVID-19 pandemic: A Florida case study. *Transport Policy*, 126, 162-176. <https://doi.org/10.1016/j.tranpol.2022.07.003>
21. Yilmaz, Z. (2022). Ranking online shopping websites by considering the criteria weights. *Journal of Business Research*, 144, 497-512. <https://doi.org/10.1016/j.jbusres.2022.02.018>
22. Wegmann, E., Müller, S. M., Kessling, A., Joshi, M., Ihle, E., Wolf, O. T., & Müller, A. (2023). Online compulsive buying-shopping disorder and social networks-use disorder: More similarities than differences? *Comprehensive Psychiatry*, 124, 152392. <https://doi.org/10.1016/j.comppsy.2023.152392>
23. Mofokeng, T. E. (2021). The impact of online shopping attributes on customer satisfaction and loyalty: Moderating effects of e-commerce experience. *Cogent Business & Management*, 8(1), 1968206. <https://doi.org/10.1080/23311975.2021.1968206>
24. Bucko, J., Kakalejčík, L., & Ferencová, M. (2018). Online shopping: Factors that affect consumer purchasing behaviour. *Cogent Business & Management*, 5(1), 1535751. <https://doi.org/10.1080/23311975.2018.1535751>
25. Kuswanto, H., Pratama, W. B. H., Ahmad, I. S., & Salamah, M. (2019). Analysis of students' online shopping behaviour using a partial least squares approach: Case study of Indonesian students. *Cogent Business & Management*, 6(1), 1699283. <https://doi.org/10.1080/23311975.2019.1699283>
26. Rahman, M. A., Islam, M. A., Esha, B. H., Sultana, N., Chakravorty, S., & Molnar, A. (2018). Consumer Buying Behavior towards Online Shopping: An Empirical Study on Dhaka City, Bangladesh. *Cogent Business & Management*. Volume 5, Issue 1. <https://doi.org/10.1080/23311975.2018.1514940>

-
27. Jibril, A. B., Kwarteng, M. A., Chovancova, M., & Pilik, M. (2019). The impact of social media on consumer-brand loyalty: A mediating role of online based-brand community. *Cogent Business & Management*, 6(1), 1673640. <https://doi.org/10.1080/23311975.2019.1673640>