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ANALYSIS OF DEMOGRAPHIC ATTRIBUTES AMONG TRADITIONAL AND ONLINE FEMALE CONSUMER SHOPPING

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Abstract

Trade and commerce have been hugely diversified in the 21ˢᵗ Century, which resulted in the occurrence of multichannel transactions. This has significantly elevated online shopping globally. Consumer shopping preferences are crucial for successful transactions, both offline and online. To investigate the demographic attributes among traditional and online female consumer shopping, the study was undertaken. The sample consisted of 398 female consumers, drawn from diverse cities in Kerala, by employing a random sampling technique. The hypothesized association among constructs was done by using measurement modeling. Demographic attributes of shopping preferences were examined, by using Logistic Regression (LR). The outcomes of the study revealed that compared to traditional shopping, income levels and marital status more strongly influenced consumer preferences for online shopping decisions. In other words, there was no significant effect on shopping preferences, in both traditional and online, by the factors of age, education, and employment

Keywords: *Demographics, Traditional Market, Online Shopping, Preferences, Consumer Perception*

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1. Introduction

The internet has become a global interconnection network, for exchanging and delivering information in the modern world (**Lim et al., 2016**). Significant changes have been made by the internet and technology in people's routine lives, providing advantages for the consumers, e-retailer and even business growth as a whole. Consequently, the internet has become a vital driver of economic expansion and business model enhancement, such as the shift from conventional purchasing to shopping online (**Nazzal et al., 2021; Wu et al., 2017**). Avenues for collecting information, product shopping, or rendering a service are included as the internet's obvious possibilities. The growth of shopping possibilities beyond more traditional, sometimes time-consuming techniques, is made possible by these advancements in internet technology (**Shanthi & Kannaiah, 2015**). Owing to the double-digit global upward trend in sales and orders, e-commerce established a nearly 2.29 trillion dollar global market (**Rahman et al., 2018**).As India turned to be net savvy, online shopping has emerged as the newest fad in India, with most browsers recommending internet shopping. In India, online shoppers have grown by 25 million in the previous year (**Khare et al., 2012**). Women are more likely than men to buy things on behalf of their partners, children, friends, coworkers, etc. Whenever a good service was offered to a woman by a company, her influence on the company's business is multiplied. Since the e-commerce sector is making great strides, the proportion of female consumers, who shop online, is expected to increase (**Raman, 2019**). Based on how much details, along with product variety, are available online, the buyer has the option of making an offline purchase or an online buy (**Kumar Nayak & Swaroop Debashish, 2017**) Depending on consumers' choices at a specific time, they may utilize both the traditional and online ways of shopping, leading to basically diverse behaviours, between the two shopping modes (**Sarkar & Das, 2019**). Demographic factors had a significant impact on people's shopping preferences. Gender, marital status, education, place of residence, and household income were often identified to be significant determinants of internet shopping for internet buyers (**Dahiya, 2012**). Hence the demographic attributes, among traditional and online female consumer shopping, were analyzed in the study.

2. Review of Literature

Kacen et al., 2013 analysed how customers think of physical and virtual retailers. The study established that disadvantages were perceived by online stores, regarding shipping and handling expenses, post-purchase service, the return's exchange-refund policy, insecurity of getting the right item, and helpfulness of sales people. **Clemes et al., 2014** investigated the factors, influencing consumers' decision to shop online. The study outcome concluded that popularity of online shopping among Chinese consumers was made possible by convenience, subjective norms, perceived risk, service quality, website factors, and product variety factors. This study's outcome might be applicable to another geographic region also. **Kwarteng & Pilík, 2017** relied on demographic information to examine consumer's preference for online buying. The study found that a few reasons, that prevent customers from shopping online, were poor internet connection, delivery problems, and privacy and security issues. This study was limited only to the sub-Saharan regions of Africa. **Lin et al., 2019** intended to investigate gender diversities in online consumer purchase decision-making. The study found that females were largely influenced by the attitude formation of diagnosticity and vividness. Additionally, males were strongly influenced by online product

presentation more than females. Students had less money at their disposal and it did have impact on purchase decisions making. **Jindal et al., 2021** examined how demographic traits impacted consumers' online shopping choices. The study revealed that online shopping was strongly influenced by the sample respondents' demographic profile of age, gender, area, education, occupation, and income. Since the data in this study were gathered in the specific states of Punjab, the result might differ in other states in India. **Boutaleb, 2022** focused on how materialism affected the impulsive shopping habits of Arab consumers. The findings highlighted that materialism did have positive impact on impulsive purchasing though materialism was not the primary cause.

Numerous studies have been done, regarding consumers' online shopping behaviours, as can be seen from the literature reviews provided above. However, there are surprisingly few studies that concentrated on female shoppers, who are more enthusiastic about going shopping. Therefore, the present study, which aims at analyzing how demographic factors could affect female consumers' preference of shopping channels, has topical importance.

3. Statement of the Problem

Among women in India, who preferred buying online, it is estimated that there will be 150 million more women consumers by the year 2020. The percentage of women, who shop online, has risen to 25 percent of all E-commerce product sales in India. The largest group of online buyers in India is women, between the age of 19 and 26, who make up 52 percent of the country's overall female online buyer population. The majority of buying still takes place offline, despite the fact that the online media has advanced greatly. In India, consumers choose offline shopping more often because of their

sensory satisfaction of touch, smell, and sight. Customers may use both traditional and online purchasing methods, depending on their preferences at a given time, which results in basically diverse behaviours between two shopping modes. People's buying preferences are significantly influenced by demographic characteristics. Gender, marital status, education, place of residence, and household income have often been recognized as major determinants of online purchasing for internet users. Marketers can more effectively classify their goods or services and determine their target market based on demographic information. The study has made an attempt to investigate how demographic factors affected, both traditional and internet shopping, among female consumers.

4. Need of the Study

With the growing popularity of e-commerce and online buying, it is important to comprehend how traditional and online female customers differed in terms of their demographic profiles, such as age, income, education, and geography. Demographic research can help the marketers to observe and adapt to shifting market demands, by identifying their current and potential customers' needs.

5. Objective of the Study

The primary goal of the study was to identify the critical demographic variables, that could affect female consumers who purchased both offline and online.

6. Hypotheses of the Study

H1: There is substantial association between age attributes and consumer shopping

H2: There is substantial association between marital status and consumer shopping

H3: There is substantial association between education level and consumer shopping

H4: There is substantial association between employment level and consumer shopping

H5: There is a substantial association between monthly income and consumer shopping

7. Research Methodology

7.1 Sample Selection

To analyze the demographic attributes among traditional and online female consumer shopping, the present research study was undertaken. Samples of the study were online and offline female customers from North Kerala, which includes Kozhikode, Kannur and Wayanad Districts. Judgment sampling was used for selecting the respondents for the study. A questionnaire was administrated to sample respondents. 450 respondents took part in the survey and 398 of them completed it, and 52 respondents failed to adequately respond to structured questionnaires.

7.2 Sources of Data

The study relied on data from both primary and secondary sources. The main data, from female respondents in North Kerala, were gathered, using the standardized and validated questionnaire. The survey was constructed by using a 5-point Likert Scale

7.3 Period of the Study

The research was carried out during the period from September 2022 to January 2023.

7.4 Tools used in the study

Simple statistical tools like percentage analysis were utilized to analyze the data. To examine the demographic variables incorporating age, gender, education, and working experience of the respondents, the questionnaire was designed intricately. The hypotheses were engendered and the consistency reliability of Cronbach's Alpha (CA) and Composite Reliability (CR) were analyzed. To gauge the demographic attributes of consumer shopping, the Logistic Regression analysis was employed.

8. Data analysis of Demographic Profile of Traditional and Online Female Consumers

Table-1 exhibits the respondents' demographic details, regarding their age, marital status, education, employment level, and monthly income. The age categories of female respondents were classified into 19 or under, 20 to 30, 31 to 40 and over 41. The majority of respondents (41.95 percent) were found in the age group of 20 to 30. 24.62 percent of respondents were in the age group of 31 to 40, followed by over 41 at 18.84 percent and 19 or under at 14.57 percent. Married and unmarried respondents were 54.27 percent and 45.72 percent respectively. Regarding education levels, the highest percentage of 50.50 percent was found to be undergraduates, followed by post-graduates at 29.39 percent, higher secondary at 14.32 percent, and diploma holders at 5.77 percent. 53.51 percent of respondents were employed whereas 46.48 percent of respondents were unemployed. Finally, each respondent's monthly income was analyzed. 30.90 percent, 48.99 percent, and 20.10 percent of respondents reported low monthly income, medium and high-monthly income respectively.

8.1. Female Consumer Shopping Preferences Based on Demographics

Female consumer preference, grounded on demographic attributes **(Lubis, 2018),** is displayed in **Table-2**. Each demographic attribute's significance levels have been computed. The majority of respondents at 74.2 percent, preferred to shop online and they were in the age growth of 20 to 30. 0.482 was the significance level of marital status. Additionally, the undergraduate and postgraduate respondents highly preferred online shopping which were 72.2 percent and 69.1 percent respectively whereas,

the high school respondents preferred traditional shopping (51.2 percent). 0.116 and 0.248 were recorded as significance level of education and employment level respectively. The medium-level monthly income respondents highly preferred online shopping to traditional shopping at 70 percent.

8.2. Influencing Factors in both Online and Traditional Shopping

The influencing factor of the consumer, to prompt them to do online shopping or traditional shopping **(Rahman et al., 2018),** is analyzed in **Table-3**. For each factor of both online and traditional shopping, the mean value was computed. Analysis revealed that influencing factors were saving time, 24/7 availability, removing waiting lines, overcoming geographical limitations, and comparison of prices in online shopping. The highest mean value (4.89) was obtained by the factor of overcoming geographical limitations. The highest mean value of 4.85 was attributed to the physical examination of products in the traditional shopping preferences, followed by the ability to compare products (4.01), and full cost disclosure (3.99).

8.3 Testing of Hypothesis

For examining the constructs of hypotheses, on demographic attributes **(Hamad & Schmitz, 2019)**, the results of analysis of the consistency reliability of Cronbach's alpha (CA) and Composite Reliability (CR), are displayed in **Table-4**. For demographic attributes of age, marital status, education, employment level, and monthly income, the CA and CR were higher than the suggested level of 0.7. In other words, it signified satisfactory internal consistency and reliability. Hence, Hypotheses, framed for this study, **H1** (CA 0.763 and CR 0.861), **H2** (CA 0.888 and CR 0.935), **H3** (CA 0.778 and CR 0.871), **H4** (CA 0.948 and CA 0.959) and **H5**

(CA 0.953 and CR 0.966), were accepted. The highest CA of 0.953 was recorded by Hypothesis 5 and its significance CR was 0.966. 0.861 was the lowest significance, obtained by Hypothesis 1.

8.4 Logistic Regression Analysis

The results of LR are demonstrated in **Table-5**. Each predictor variable's Wald's test and the odd-ratio on demographic attributes of shopping preferences, are also shown **(Lubis, 2018)**. In this analysis, the significance level was considered at 5 percent. A significant effect on online shopping preferences was created by respondents' income level at this level. A level of 3.260 was obtained by the odd-ratio level of respondents, who were having families. In other words, it was 3.260 times greater than that of those who were unmarried or single. But noteworthy influence was not provided by the education level of respondents. Thus, 11.613 was the odd ratio of the high-income group, that indicated 11.613 times higher chance of online shopping.

9. Findings of the Study

In this study, it was shown that there were differences in the demographic features of female consumers when they shop in traditional and online stores. The odd ratio of 8.348 indicated that the possibility of online buying was higher for the consumer, with higher income. Compared to traditional shopping, income levels and marital status had exercised stronger impact on female consumer preferences for internet shopping. Other demographic factors like age, education, and occupation did not have any discernible impact on shoppers' preferences, whether they shopped in-store or online.

10. Suggestions

Retailers can use social media networks, to promote social commerce, giving female users the capability to buy directly from their

social media feeds. Online retailers can use an effective marketing mix, to gain the trust of their customers, including money-back guarantees, after-sales assistance, replacement of faulty and damaged goods, and customer complaint mechanisms. By giving healthy products, broadcasting information regarding the product's source and manufacturing, and collaborating with ethical suppliers, retailers can encourage ethical and sustainable shopping habits among female consumers.

11. Conclusion

To examine the demographic attributes of female consumers, who purchased both offline and online, the present study was conducted. The influencing factor of consumer preferences for traditional and online shopping was examined in this study. From 398 respondents, from diverse cities in Kerala, the data were gathered. For the data collection, simple random sampling technique was utilized in this study. This study concluded that in both traditional and online shopping, consumers' demographic characteristics revealed variation. The consumer, with more income, was likely to go for online shopping as evident from the odd ratio of 8.348. Online purchasing decisions of female consumers were influenced by income levels. Further, there were no discernible differences in shopping preferences by the attributes of age, education, or employment.

12. Limitations of the Study

The study was focused only on female consumers and a few cities in Kerala. If it had been conducted in some other cities in India, with another segment of population, the result might have been different. As a result, generalizations cannot be made on the basis of findings.

13. Scope for Further Study

Only female consumers in Kerala were used as the sample for this study. The study can be expanded in the future, by including more populations from diverse urban and rural areas, including all genders, and analyzing consumer buying preferences. By establishing appropriate target consumers and market categories, this study could help sellers to enter traditional markets as well as extend into the internet market.

14. References

Boutaleb, B. (2022). Effect of materialism on impulsive buying behavior: An empirical study of Arab consumers. *SMART Journal of Business Management Studies*, *18*(1), 47-54

Clemes, M. D., Gan, C., & Zhang, J. (2014). An empirical analysis of online shopping adoption in Beijing, China. *Journal of Retailing and Consumer Services*, *21*(3), 364–375. https://doi.org/10.1016/j.jretconser.2013.08.003

Dahiya, R. (2012). Factors of Consumers on Online Shopping Behaviour/ : A Study of Consumers in India. *Intenational Journal of Engineering and Management Studies*, *3*(1), 43–52.

Hamad, H., & Schmitz, M. (2019). The Impact of Demographic Variables and Consumer Shopping Orientations on the Purchasing Preference for Different Product Categories in the Context of Online Grocery Shopping. *Journal of Marketing and Consumer Research*, 52, 21–32. https://doi.org/10.7176/jmcr/52-05

Jindal, T., Bassi, P., & Kaur, M. (2021). Influence Of Demographic Profile Of Consumers On Online Shopping Behaviour. *Think India*, *22*(4), 4338–4352.

Kacen, J. J., Hess, J. D., & Kevin Chiang, W.Y. (2013). Bricks or Clicks? Consumer Attitudes

toward Traditional Stores and Online Stores. *Global Economics and Management Review*, *18*(1), 12–21. https://doi.org/10.1016/s2340-1540(13)70003-3

Khare, A., Khare, A., & Singh, S. (2012). Attracting Shoppers to Shop Online-Challenges and Opportunities for the Indian Retail Sector. *Journal of Internet Commerce*, *11*(2), 161–185. https://doi.org/10.1080/15332861.2012.689570

Kumar Nayak, P., & Swaroop Debashish, S. (2017). Young Consumers' Online Shopping Decision Influencers: A Study on University students of Odisha. *Effulgence-A Management Journal*, *15*(1), 45-50.

Kwarteng, M. A., & Pilík, M. (2017). Exploring Consumers' Propensity for Online Shopping in a Developing Country: A Demographic Perspective. *International Journal of Entrepreneurial Knowledge*, *4*(1), 90–103. https://doi.org/10.1515/ijek-2016-0007

Lim, Y. J., Osman, A., Salahuddin, S. N., Romle, A. R., & Abdullah, S. (2016). Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention. *Procedia Economics and Finance*, *35*, 401–410. https://doi.org/10.1016/s2212-5671(16)00050-2

Lin, X., Featherman, M., Brooks, S. L., & Hajli, N. (2019). Exploring Gender Differences in Online Consumer Purchase Decision Making: An Online Product Presentation Perspective. *Information Systems Frontiers*, *21*(5), 1187–1201. https://doi.org/10.1007/s10796-018-9831-1

Lubis, A.N. (2018). Evaluating the customer preferences of online shopping: Demographic

factors and online shop application issue. *Academy of Strategic Management Journal*, *17*(2), 1–13.

Nazzal, A., Thoyib, A., Zain, D., & Sabil Hussein, A. (2021). The Influence of Digital Literacy and Demographic Characteristics on Online Shopping Intention: An Empirical Study in Palestine. *Journal of Asian Finance*, *8*(8), 205–0215. https://doi.org/10.13106/jafeb.2021.vol8.no8.0205

Rahman, M. A., Islam, M. A., Esha, B. H., Sultana, N., & Chakravorty, S. (2018). Consumer buying behavior towards online shopping: An empirical study on Dhaka city, Bangladesh. *Cogent Business and Management*, *5*(1),1-22. https://doi.org/10.1080/23311975.2018. 1514940

Raman, P.(2019). Understanding female consumers' intention to shop online: The role of trust, convenience and customer service. *Asia Pacific Journal of Marketing and Logistics*, *31*(4), 1138–1160. https://doi.org/10.1108/APJML-10-2018-0396

Sarkar, R., & Das, S. (2019). Online Shopping vs Offline Shopping/ : A Comparative Study. *IJSRST*, *3*(1), 424–431.

Shanthi, R., & Kannaiah, D. (2015). Consumers' Perception on Online Shopping. *Journal of Marketing and Consumer Research*, *27*, 30-34.

Wu, W.Y.,Quyen, P. T. P., & Rivas, A.A.A. (2017). How e-servicescapes affect customer online shopping intention: the moderating effects of gender and online purchasing experience. *Information Systems and E-Business Management*, *15*(3), 689–715. https://doi.org/10.1007/s10257-016-0323-x

Table-1: Results of Demographic Analysis of the Respondents of Traditional and Online Female Consumers

Demographic characteristics	Frequency (N)	Percentage (%)
Age		
19 or under	58	14.57
20 to 30	167	41.95
31 to 40	98	24.62
Over 41	75	18.84
Marital status		
Married	216	54.27
Unmarried	182	45.72
Education		
High school	57	14.32
Diploma	23	5.77
Undergraduate	201	50.50
Postgraduate	117	29.39
Employment level		
Employed	213	53.51
Unemployed	185	46.48
Monthly Income		
Low	123	30.90
Medium	175	48.99
High	82	20.10

Source: Primary Data analysis using SPSS

Table-2: Results of Female Consumer Shopping Preferences Based on Demographic Variables

Demographic variables	Traditional shopping preferences (%)	Online shopping preferences (%)	Sig.
Age group			0.213
19 or under	48.1	51.9	
20 to 30	15.8	74.2	
31 to 40	36.6	63.4	
Over 41	43.8	56.2	
Marital status			0.482
Married	35.5	65.5	
Unmarried	45.3	54.7	

Education			0.116
High school	51.2	48.8	
Diploma	36.5	63.5	
Undergraduate	27.8	72.2	
Postgraduate	30.9	69.1	
Employment level			0.248
Employed	42.3	58.7	
Unemployed	32.5	67.5	
Monthly Income			0.023
Low	37.7	62.3	
Medium	30	70	
High	35.9	64.1	

Source: Primary Data computed using SPSS

Table-3: Results of Female Consumer Preferences and Influencing Factors in Traditional and Online Shopping

Factor	Mean
Online shopping preferences	
Saves times	4.12
24/7 availability	3.95
Remove waiting line	4.44
Overcome geographical limitation	4.89
Comparison of price	4.60
Traditional shopping preferences	
Ability to compare products	4.01
Physical examination of products	4.85
Full cost discloser	3.99

Source: Primary Data computed using SPSS

Table-4: Results of Analysis of Cronbach's and Composite Reliability (CR) Regarding Female Consumer Shopping in North Kerala

	Cronbach's α	CR*
H1	0.763	0.861
H2	0.888	0.935
H3	0.778	0.871
H4	0.948	0.959
H5	0.953	0.966

Source: Primary Data computed using SPSS

Table-5 : Results of LR Analysis of Demographic Attributes of Female Consumer Shopping in North Kerala

Predictor	Unstandardized regression weight (B)	Standard error (SE)	Wald	Degrees of freedom (df)	Sig.	Odd Ratio
Age (0=19 or under)			0.124	3	0.993	
20 to 30	-0.108	0.779	0.021	1	0.898	0.913
31 to 40	0.129	0.715	0.033	1	0.870	1.142
Over 41	0.117	0.744	0.025	1	0.890	1.120
Marital status (0=Single)	1.185	0.683	3.015	1	0.098	3.260
Education (0=High school)			1.575	3	0.685	
Diploma	-432	0.833	0.236	1	0.613	0.669
Undergraduate	0.356	0.539	0.428	1	0.526	1.421
Postgraduate	0.791	0.990	0.641	1	0.444	2.190
Employment level (0=Unemployed)	1.048	0.499	2.087	1	0.055	1.017
Monthly Income (0=Low)			8.348	2	0.024	
Medium	2.123	0.798	7.240	1	0.011	8.258
High	2.557	0.895	7.623	1	0.010	11.613

Source: Primary Data computed using SPSS