
AN EMPIRICAL ANALYSIS AND COMPREHENSIVE INVESTIGATION ON CUSTOMER QUALITY SATISFACTION ON ONLINE SHOPPING

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Abstract: Online Shopping implies the usage of virtual technology for the acquisition of products or services. The virtual technologies used are an addition to the conventional retailing strategies and are called e-tailing, virtual, net or online advertising and marketing. Online advertising and marketing are described as “the artwork and technology of promoting merchandise and/or offerings over virtual networks, together with net and mobile phone networks. It includes the artwork of the usage of proper blend of the techniques to draw the purchasers and the technology of comparing the achievement of the techniques. Online shopping is different from traditional brick and mortar shopping as one does not have to move out to buy things. With the help of internet and laptop or mobile phone one can do shopping. So nowadays people are moving from traditional brick and mortar to click and collect purchasing mode. However, this mode of purchasing is in the progressive phase in our country and hardly any study has been done to explore the factors related to service quality, customer satisfaction and customer loyalty in online purchasing. In the present research work qualitative and quantitative research together have been adopted to extract the different factors affecting online service quality, customer satisfaction and customer loyalty and to show the association. A total of 913 questionnaires were kept for the purpose of data analysis. A non-disguised structured questionnaire has been designed containing close ended questions and questions on 5-point Likert scale for the motive of collecting data. Reliability of the scales was checked with the help of Cronbach’s Alpha, Eigen values and Bartlett’s test of Sphericity. Validity of the collected data was checked using Content validity, External validity and Correlation between summated scales.

Keywords: E-commerce, statistical analysis, online shopping, reliability, and customer satisfaction.



Introduction

The Indian retail sector is one of the leading sectors. It has achieved 950 billion US\$ in the year 2018 at compound yearly progress rate of thirteen per cent and anticipated to grow by 1.1 trillion US\$ by the year 2020 [1]. The revenue from the traditional retailer in India who are also called as brick-and-mortar retailer, is estimated to rise by Rs 10,000-12,000 crore (US\$ 1.39-2.77 billion) in financial year 2020 (IRIR, 2020). India is likely to develop as the fastest rising e-business market of the world, obsessed by vigorous outlay in this industry and swift boost in the amount of web users. The expectations of different organizations are soaring regarding the progress of Indian reselling market. In the current scenario e-selling has altered the approach of doing trade in the country.

With rapid boom in internet adoption the retail shopping is transferring from traditional brick and mortar mode to click mode that is to online buying. According to IAMAI report there are 120 MN online consumers in India by means of 2019 and this quantity is expected to increase by 220 MN online shoppers by 2025. The financial influences of the corona virus (COVID-19) lockdown since late March 2020 also boosted the adoption of online shopping and online payments. India's e-trade marketplace has the ability to grow extra than 4 folds to Rs 10, 48,350 crore (US\$ one hundred fifty billion) via 2022 supported through the growing earning and increase in internet users [2, 3].

Different companies are adopting various unconventional approaches of advertising and marketing so that they can survive in the highly competitive market. Adoption of Internet is considered to be the excellent unconventional shape of advertising that has been embraced by the companies. Since the usage of internet is increasing day by day so it has come to be a popular advertising and marketing instrument. People are using internet for shopping of services like tourism, financial services, clothing, Health care, merchandise, tools and various others. According to World Bank, Online sales in India accounted for 1.6% of total retail sales, as opposed to over 15% for China and around 14% globally. Though as of now in our country online trading is a very small part of overall retail, it's far anticipated to grow at a faster pace. Online consumers, which is anticipated at Rs 12,800 is predicted to increase to Rs 25,138 by FY30. With the increase in usage of Smartphone, the introduction of 4G networks and swelling client prosperity, the e-commerce of India is anticipated to develop to US\$ 200 billion by the year 2026 [4]. In the year 2019, mobile handsets have been the major contributor to online retail income in Indian retail market followed closely by mobile and electronic accessories, different purchases of electronics including printers, routers, laptops, and domestic décor [5].

Overall, online customers in India are expected to attain 220 million via 2025. (IBEF report on e-commerce, May 2020). Today, almost all business companies are using internet to provide their product or services to its customers and also these companies advertise and promote their products or services on the same platform that is internet. The internet gives an excessive degree of interplay and affords clients unparalleled benefits, from comfort to good deal prices. The ever-increasing mainstream activity on the internet has opened up an entire new fee of gaining clients [6].

Thousands of organizations, especially retailers, have been drawn onto the internet through a worry that they might be left behind in the market if they will not use internet selling as a mode of selling. The growing utilization of the internet as most communicating source, between the Indian people endow with a possibility for doing fundamental research to understand, the attitude of customers of India using the online shopping services. In India the e-entrepreneurs can frame their strategies for online advertisement if they recognize the various factors that drives the customers towards online shopping [7].

Technological trends have converted the internet into a mainstream business medium, also the customers who purchase online are mellowing and virtual entrepreneurs are knowing the significance of professional and client focused approach. Marketing has moved from selling of basic necessities to selling of specific facilities. Companies today view consumer needs as the focal points for identification, analysis and development of the strategy (Kumar Rahul 2016). As per American Marketing Association (AMA), “Marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas; goods and services to create exchange that satisfy individual and original goals”. There are various channels of marketing which can be used to establish contact with the consumers. These channels could be retail stores, website, mail order catalogues or direct personal communication by a letter, email or text message [8].

Online Shopping

Online Shopping implies using digital technologies for the purchase of products or services. The digital technologies used are an addition to the conventional retailing techniques and are referred to as e-tailing, virtual, web or on-line marketing. Online marketing includes the artwork of using proper mix of the strategies to draw the purchasers and the technological know-how of evaluating the success of the strategies used. The decision-making procedure of the buyer has modified vividly in current years. Before buying the goods from the offline market by interacting with the salesman, the buyers are going through great research online. The customers are making direct purchases online on their personal



computers, laptops and via their smartphone, they never moving foot to traditional brick-and-mortar locations.

“Online shopping is becoming hobby of many of the people and is an everyday part of most people’s lives and a quiet change is taking place that's empowering purchasers and shifting the balance of strength within the supply chain closer to the customers” (Doherty et.al 2010). Since Online shopping saves a lot of time of the consumer so it considered as the boon for the shoppers. It is (online shopping) a technique through which customers directly purchase goods and services from a computer-generated seller without a transitional service on the Internet [9].

By sitting back at their places shoppers can visit web shops with the internet connection on their computer or mobile phones, saving their time and resources. So, e-shopping stores are usually to be had twenty hours a day and most of the clients have internet access to online purchase both at work or at home. So, it becomes very convenient for them to keep Online and purchase goods. The most alluring aspect of online buying, in especially throughout vacation period is that it reduces the necessity to wait in lengthy queue or seek a specific item from the store. The various variety of merchandise can be accessed in online shopping. So, researchers need to recognize the choice of the consumers. (Gnanadhas M. Edwin June 2014).

The company's efforts to enhance customer satisfaction through various customer service activities are crucial for business success. These activities encompass pre-purchase, purchase, and post-purchase services, delivered through channels like emails, helplines, FAQs, and doorstep services. Strong customer relationships, influenced by quality service, can significantly increase earnings. However, challenges such as measuring service quality, adapting to dynamic online shopping trends, and ensuring security pose hurdles. Moreover, customer satisfaction in online shopping is influenced by factors like product quality, service information, and site interface, impacting consumer behavior and loyalty. Maximizing customer satisfaction requires a customer-centric approach, emphasizing product and service quality, employee satisfaction, and meeting customer expectations. Satisfied customers lead to business growth through repeat purchases, positive word-of-mouth, and extended product lifecycles [10-18]. Therefore, prioritizing customer satisfaction is essential for sustained business success in the digital era.

Objective and Hypotheses

The research aims to investigate the demographic characteristics of online shoppers and their impact on loyalty to online shopping portals. Specific objectives include analyzing the socio-economic status of online shoppers and their awareness of online purchase processes and motivating factors. Additionally, the study will assess customer perceptions and satisfaction levels with online shopping in the India, focusing on factors influencing satisfaction. It will also identify challenges faced by online shoppers in utilizing services provided by India online portals. Finally, the research aims to develop a model depicting the relationship between customer perceptions and satisfaction with online shopping portals in the India.

The following hypotheses have been framed for examining the customer perception towards online shopping,

H1 : There is no significant difference between respondent's gender, age, educational qualification, occupational status, monthly family income, marital status, family type, family size and experience in product purchase through online, preferred online portal for purchase, mode of payment and level of awareness about the online purchase.

H2 : There is no significant difference between respondent's gender, age, educational qualification, occupational status, family monthly income, marital status, family type, family size, and experience in product purchase through online, preferred online portal for purchase, mode of payment and level of perception towards online purchase.

H3 : There is no significant association between the respondent's gender, age, educational qualification, occupational status, family monthly income, marital status, family type, family size, experience in purchase products through online, preferred online portal for purchase, mode of payment and their satisfaction towards services offered by the online shopping portals in India.

Research Methodology

The descriptive research design has been used in this research; hence questionnaires and interviews are used for data collection. Questionnaires and interview patterns are developed through focus group discussions with some online shoppers and professionals associated with online shopping. In the pilot study, the standard deviation and standard error of the selected 50 consumers is 0.55 and 0.04

respectively. By using this formula, the calculated sample size was 726. Twenty six samples were rejected from the analysis due to biased and unfilled responses from the selected sample respondents. Valid 700 samples were considered for the data analysis.

SPSS is a computer program for survey authorizing and deployment (IBM SPSS data collection), data mining (IBM SPSS modeler), tent analytics, statistical analysis, and collaboration and deployment (batch and automated scoring services). SPSS is the world's leading provider of predictive analytics software and solution. By using structured questionnaire, the primary data have been collected. The questionnaire was verified by the research experts, research scholars, online shoppers for its wording, format, logical order and so forth. (Saravanan, S., & Brindha Devi, K. (2015), Ahmed Audu Maiyaki, & Sany Sanuri Mohd Mokhtar, (2016), Fatimah Furaiji, Małgorzata Łatuszyńska, & Agata Wawrzyniak, (2012), Sema Sakarya, & Nagehan Soyer, (2013), Mishra, S.J., Rout, D., Sarkar, P., & Naik, P. (2021), Poonam Deshprabhu – Sadekar and Naila Pereira, (2018), Jitendra Bhandari, Sunil Dhanavade, & Vijay Dhamore, (2021), and Bharti Aggarwal, & Deepa Kapoor, (2020))

Result and Discussion

The demographic data collected from 700 respondents provides valuable insights into various aspects of the surveyed population. Firstly, examining gender distribution reveals that males make up the majority at 61.3%, with females comprising 38.7% of the sample. This indicates a slight gender imbalance within the respondent pool. Moving on to age demographics, the largest age group falls within the 31 to 40 years category, constituting 34.1% of the total respondents, followed closely by individuals aged 20 to 30 years at 28.9%. Meanwhile, the proportions decrease with advancing age, with 26.1% falling within the 41 to 50 years bracket, and only 10.9% being above 50 years old. This distribution reflects a diverse age range within the surveyed population.

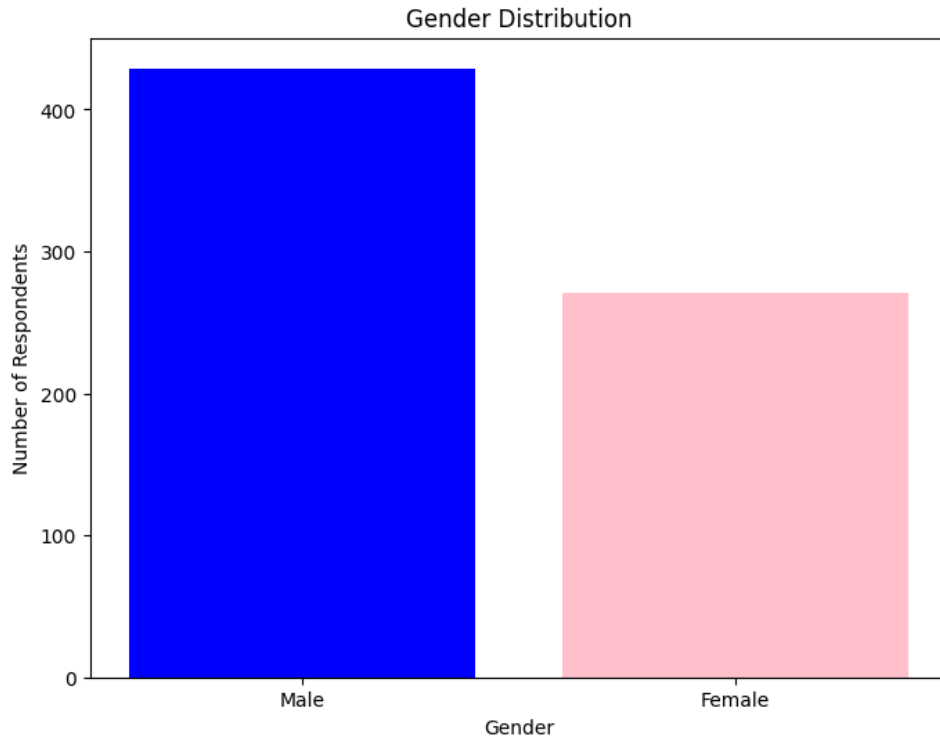


Figure 1. Gender Distribution

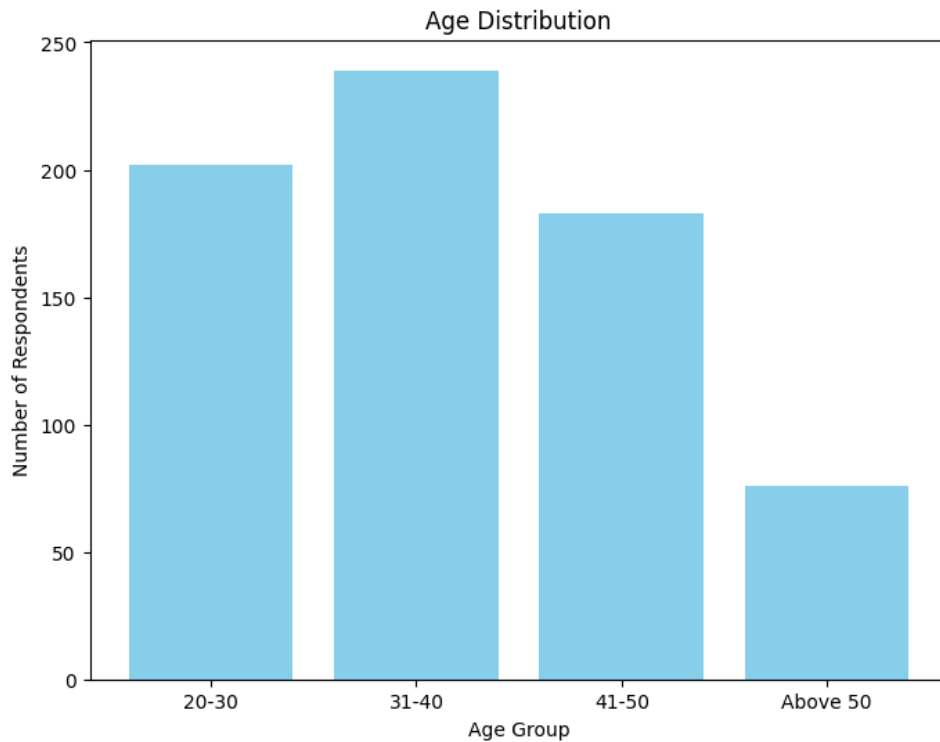


Figure 2. Age Distribution

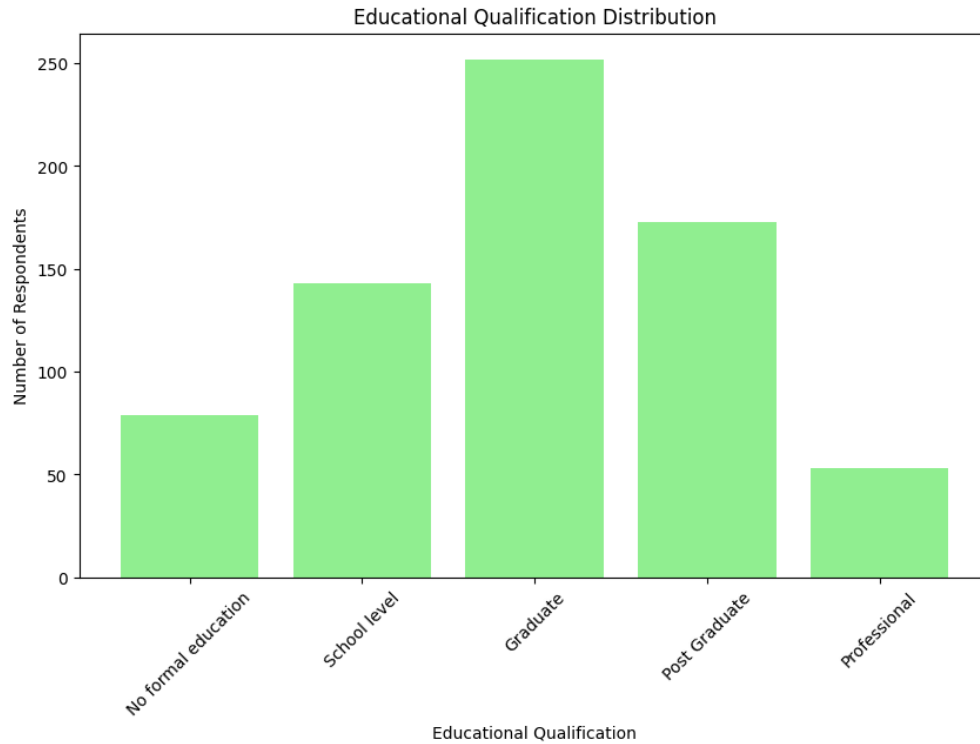


Figure 3. Educational Qualification

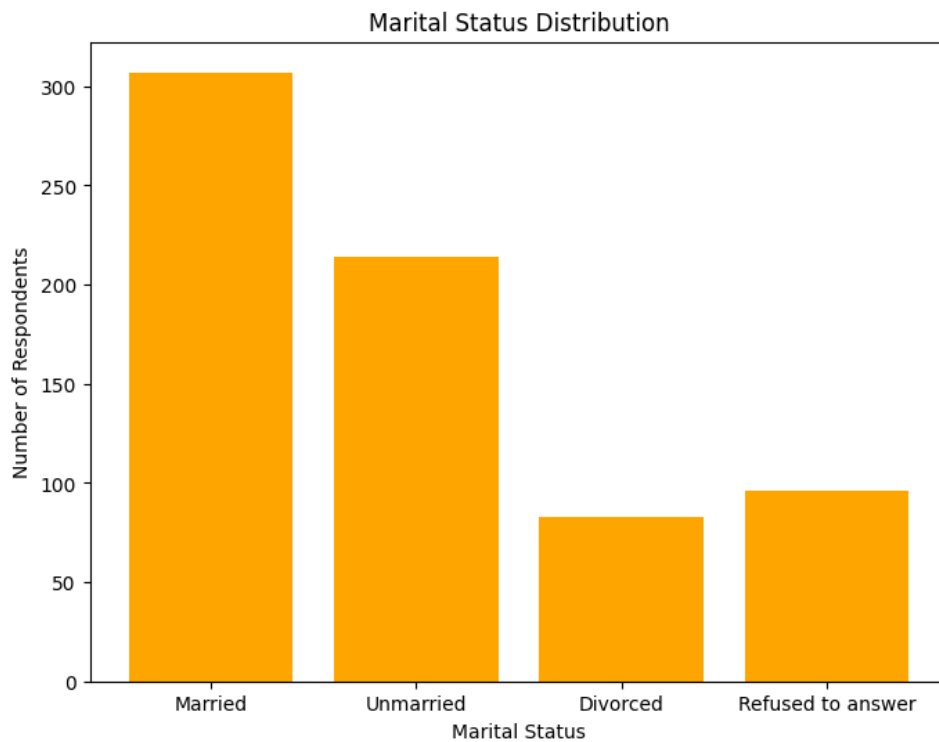


Figure 4. Marital Status Distribution

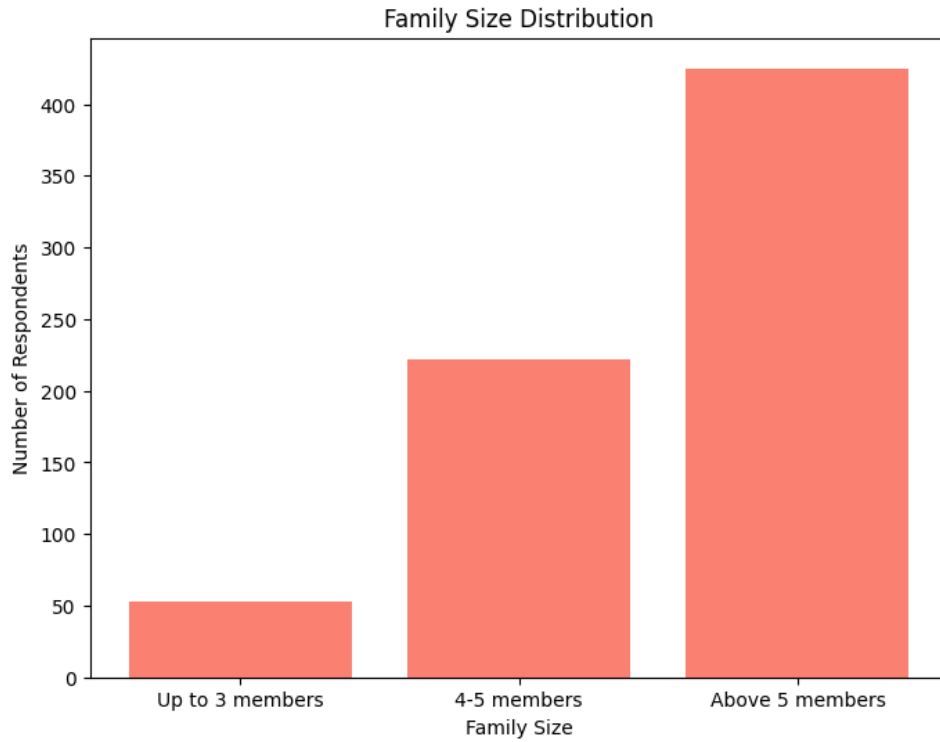


Figure 5. Family Size

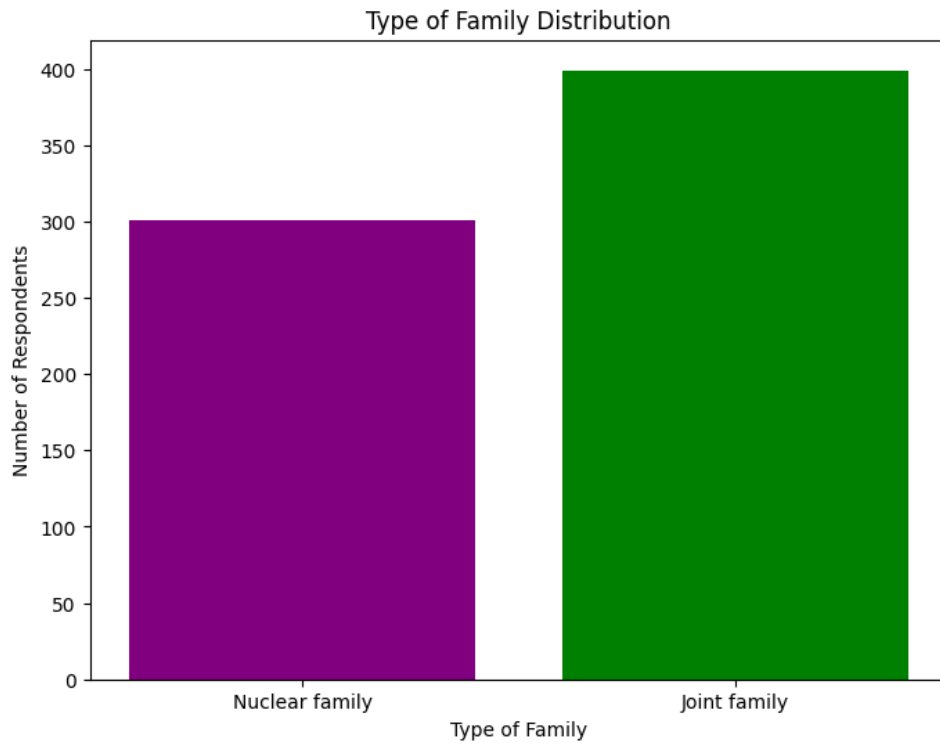


Figure 6. Family Type

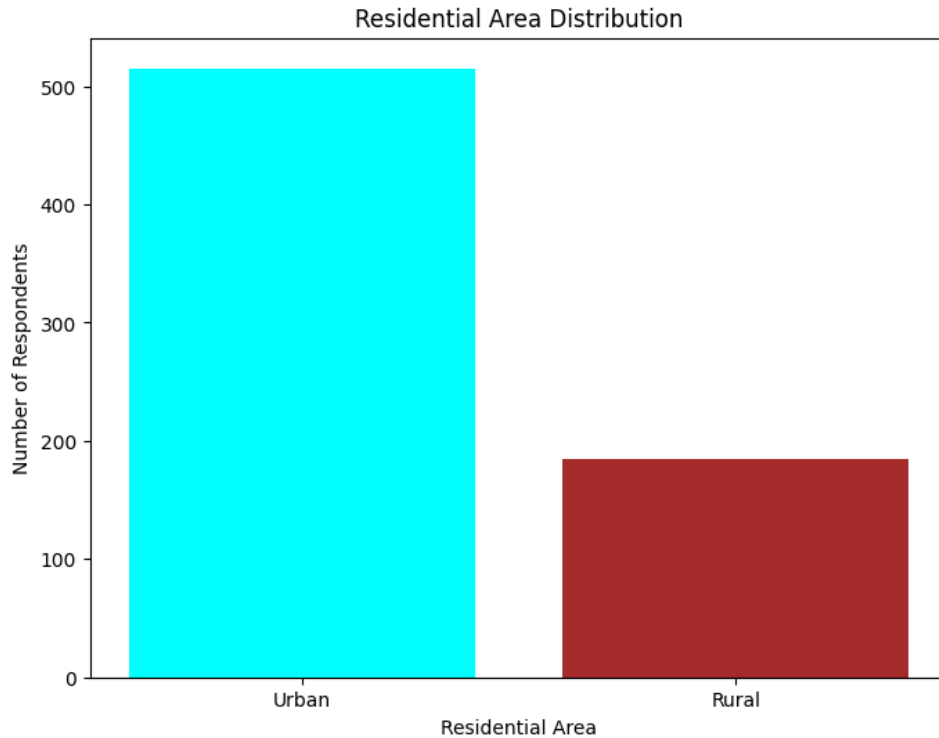


Figure 7. Residential Area Type

Educational qualifications of the respondents exhibit a varied landscape, with graduates forming the largest group at 36.0%, followed by postgraduates at 24.7%. Notably, a significant portion of respondents have completed schooling (20.4%), while smaller proportions have pursued professional qualifications (7.6%) or have no formal education (11.3%). This diversity in educational backgrounds enriches the dataset, providing a comprehensive understanding of the respondents' academic profiles.

Marital status data showcases a range of relational statuses among the respondents. The majority are married, comprising 43.9% of the sample, while unmarried individuals account for 30.6%. Moreover, a noteworthy proportion (13.6%) refused to disclose their marital status, indicating potential sensitivities surrounding this aspect. Divorced respondents represent 11.9% of the total, suggesting a significant presence of individuals who have undergone marital dissolution within the surveyed population.

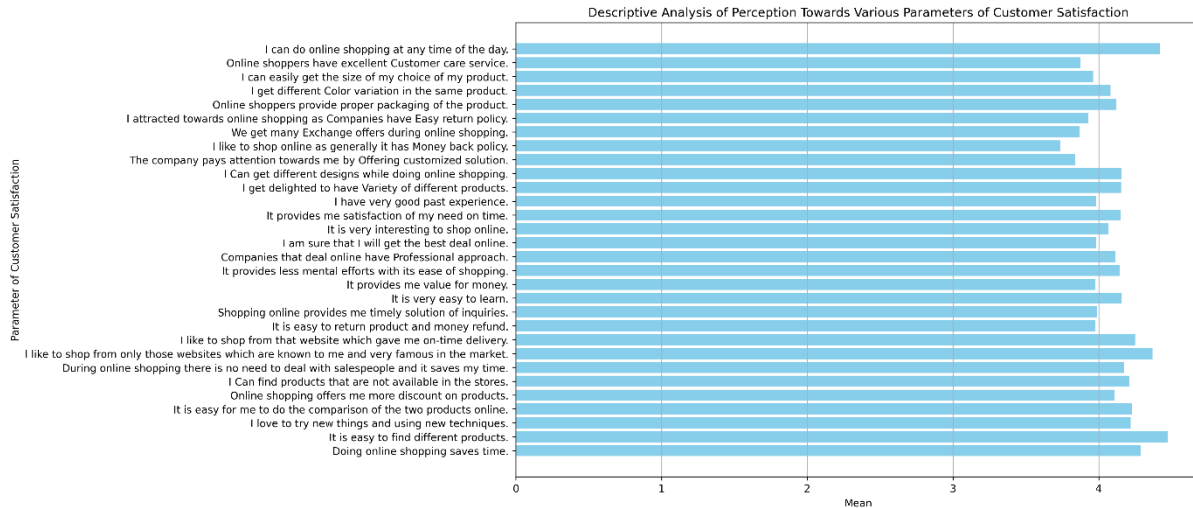


Figure 8. Descriptive Analysis on Customer Satisfaction

Family size distribution highlights the predominance of larger households, with over 60% of respondents indicating family sizes above 5 members. Conversely, smaller family units with up to 3 members constitute only 7.6% of the sample, while households with 4 to 5 members represent 31.7%. This distribution underscores the diversity in family structures among the respondents, which could impact various sociological and economic dynamics within the community.

Examining the type of family arrangements reveals a relatively balanced distribution between nuclear and joint families, with 43.0% and 57.0%, respectively. This indicates a significant presence of both traditional nuclear families and more extended family structures within the surveyed population. Such diversity in familial setups can influence social interactions, support networks, and resource allocation within the household.

The residential area distribution portrays a predominantly urban-centric demographic, with 73.6% of respondents residing in urban areas compared to 26.4% in rural regions. This urban-rural divide highlights differing socio-economic contexts, infrastructure availability, and lifestyle preferences among the surveyed population. Understanding the residential distribution is crucial for contextualizing various aspects of the respondents' experiences and needs, particularly concerning access to services, employment opportunities, and quality of life indicators.

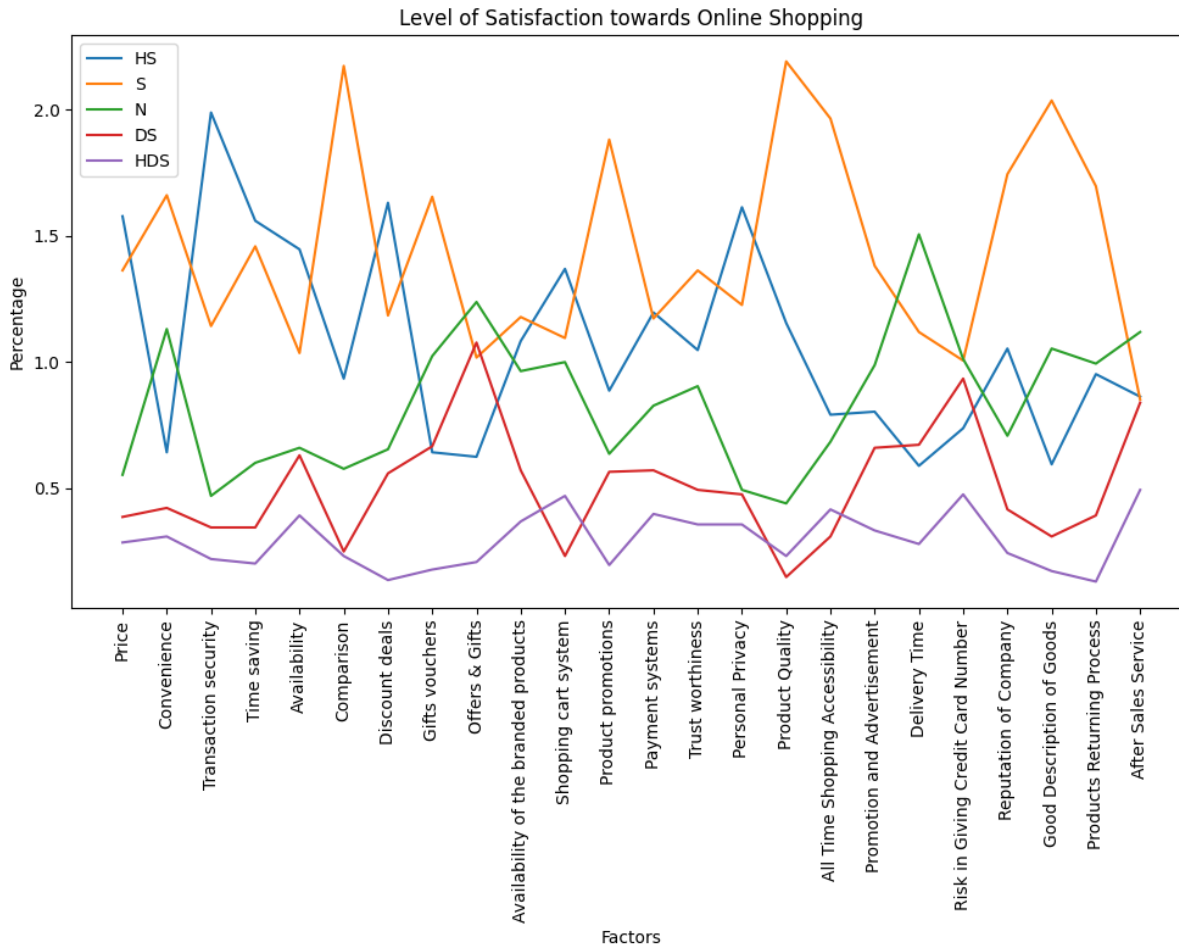


Figure 9. Customer Satisfaction Towards Shopping

The comprehensive analysis of demographic data provides valuable insights into the characteristics and composition of the surveyed population. From gender and age demographics to educational qualifications, marital statuses, family structures, and residential distributions, each aspect contributes to a nuanced understanding of the respondents' profiles. Such insights are essential for informing targeted interventions, policy formulation, and research endeavors aimed at addressing the diverse needs and challenges within the surveyed community.

The research article delves into the nuanced landscape of awareness towards online shopping portals among respondents, scrutinizing various demographic factors such as gender, age, educational qualification, monthly income range, living emirate, marital status, family size, residential area, frequency, and mode of purchase. Notably, male online shoppers exhibited a higher level of awareness compared to their female counterparts, supported by ANOVA analysis indicating a significant

difference. While customers aged 20 to 30 years showcased the highest awareness, professionals emerged as the most aware among different educational qualification groups.

Despite varied monthly income ranges, no significant difference in awareness was observed. Conversely, residents of Umm al Quwain demonstrated the highest awareness among different emirates, with rural shoppers surpassing urban counterparts. Moreover, while married individuals exhibited the highest awareness, family size significantly influenced awareness levels. Interestingly, despite diverse modes of purchase, no significant disparity in awareness was noted, elucidated by ANOVA analysis. Additionally, customers influenced by best deals displayed the highest awareness, though no substantial difference was discerned among various factors influencing purchase. The study further elucidated respondents' proficiency in internet usage and their frequency of online purchases, highlighting a predominant trend towards moderate internet proficiency and a notable frequency of 16 to 20 online purchases in the past year.

Conclusion

In analyzing the level of satisfaction towards online shopping across various factors, several trends emerge. Price, transaction security, and convenience are highly influential, with high satisfaction levels indicating their importance. Factors like product quality, availability, and discounts also significantly impact satisfaction. Interestingly, while factors such as comparison and gifts vouchers have relatively lower satisfaction levels, they still play notable roles in shaping online shopping experiences. Moreover, aspects like after-sales service and the reputation of the company are critical for ensuring overall customer satisfaction and trustworthiness. These findings underscore the multifaceted nature of online shopping satisfaction, where a combination of factors contributes to shaping consumers' perceptions and experiences, emphasizing the need for holistic approaches in enhancing online shopping platforms.

Reference

1. Mtotywa, M. M., & Kekana, C. (2023). Post COVID-19 online shopping in South Africa: A mediation analysis of customer satisfaction on e-service quality and purchase intention. *African Journal of Science, Technology, Innovation and Development*, 15(5), 533-546.
2. Fitri, S., Wardana, Y. F. W., Mustafa, F., Sari, E. N., & Arief, I. (2023). Analysis of The Influence of Online Purchase Decisions, Digital Perceive Value of Quality and Digital Viral

- Marketing on Consumer Satisfaction of Skincare Products. *JurnalInformasi dan Teknologi*, 148-152.
3. Kumar, A., Chakraborty, S., & Bala, P. K. (2023). Text mining approach to explore determinants of grocery mobile app satisfaction using online customer reviews. *Journal of Retailing and Consumer Services*, 73, 103363.
 4. Susanto, H., Muamar, M., Prasetyo, D., Purnomo, E. C., & Riyadi, A. (2023). THE INFLUENCE OF PRICE AND TRUST ON CONSUMER SATISFACTION IN SHOPPING ONLINE SHOP (TOKOPEDIA) IN SAMPIT. *Jurnal Ekonomi*, 12(01), 1052-1061.
 5. Tharini, V. J., & Shivakumar, B. L. (2022). High-utility itemset mining: fundamentals, properties, techniques and research scope. In *Computational intelligence and data sciences* (pp. 195-210). CRC Press.
 6. Park, J. (2023). Combined Text-Mining/DEA method for measuring level of customer satisfaction from online reviews. *Expert Systems with Applications*, 232, 120767.
 7. Kajandren, R., Ariffin, N. A. B., Manimaran, P., Maniselvan, D., Ravindran, V., & Kanapathipillai, K. (2023). AN ANALYSIS OF THE FACTORS THAT IMPACT THE CUSTOMERS'SATISFACTION ON ONLINE FOOD DELIVERY SERVICES IN PETALING JAYA, SELANGOR, MALAYSIA. *European Journal of Social Sciences Studies*, 8(4).
 8. Mainardes, E. W., Coutinho, A. R. S., & Alves, H. M. B. (2023). The influence of the ethics of E-retailers on online customer experience and customer satisfaction. *Journal of Retailing and Consumer Services*, 70, 103171.
 9. Awal, M. R., Hossain, M. S., Arzin, T. A., Sheikh, M. I., & Haque, M. E. (2023). Application of the SOBC model to study customers' online purchase intentions in an emerging economy during COVID-19: does gender matter?. *PSU Research Review*.
 10. Tharini, V. J., & Shivakumar, B. L. (2023). An efficient pruned matrix aided utility tree for high utility itemset mining from transactional database. *International Journal of Intelligent Systems and Applications in Engineering*, 11(4s), 46-55.
 11. Rana, S., Bag, S., Ghosal, I., & Prasad, B. (2023). How do influencers moderate purchase motives? An application of SOR model to assess the effects of reviewers' rating on online purchase. *Journal of Promotion Management*, 29(8), 1168-1197.

12. Jeevika Tharini, V., & Vijayarani, S. (2020). Bio-inspired High-Utility Item Framework based Particle Swarm Optimization Tree Algorithms for Mining High Utility Itemset. In *Advances in Computational Intelligence and Informatics: Proceedings of ICACII 2019* (pp. 265-276). Springer Singapore.
13. Anas, M., Khan, M. N., & Uddin, S. F. (2023). Mapping the concept of online purchase experience: a review and bibliometric analysis. *International Journal of Quality and Service Sciences*, 15(2), 168-189.
14. Jahir, M. S. F. B. M., & Hwa, E. T. B. (2023). Customer e-satisfaction towards online grocery sites in the metaverse world. In *Strategies and Opportunities for Technology in the Metaverse World* (pp. 294-320). IGI Global.
15. Saha, S. K., Duarte, P., Silva, S. C., & Zhuang, G. (2023). The role of online experience in the relationship between service convenience and future purchase intentions. *Journal of Internet Commerce*, 22(2), 244-271.
16. Aljabari, M. A., Joudeh, J. M., Aljumah, A. I., Al-Gasawneh, J., & Daoud, M. K. (2023). The impact of website quality on online purchase intention: The mediating effect of e-WOM, Jordan context. *International Journal of Professional Business Review*, 8(6), e02143-e02143.
17. Enemuo, J. I., Onyejiaku, C. C., & Ben Etim, U. D. O. H. (2023). Service quality and customer satisfaction of online retail stores in enugu, nigeria.
18. Limna, P., Kraiwanit, T., & Jangjarat, K. (2023). Adopting the technology acceptance model (TAM) to explore online purchase intention via Facebook live streaming: Empirical evidence from Bangkok, Thailand. *ASEAN Journal of Management & Innovation*, 10(1), 1-13.