



Exploring The Impact Of Trust, Social Influence, And Peer Recommendation On Buying Behavior In Online Shopping: A Structural Equation Modeling Approach"

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ABSTRACT

The aim of this study was to investigate the impact of trust, perceived reliability, social influence, and peer recommendation on buying behavior in online shopping. Structural equation modeling (SEM) was employed to analyze the relationships between latent variables and their observed counterparts. The findings revealed significant positive relationships between social influence, peer recommendation, trust, and buying decision, indicating that consumers are influenced by external factors and tend to trust recommendations from peers when making online purchases. Moreover, trust emerged as a key factor, highlighting the importance of consumer trust in online transactions. However, perceived reliability showed a trend towards significance, suggesting that while consumers value reliability, its impact may not reach conventional levels of statistical significance. The study contributes to understanding consumer behavior in the online shopping context, providing valuable insights for businesses and policymakers. Moving forward, exploring the impact of emerging technologies such as artificial intelligence, augmented reality, and virtual reality on online consumer behavior represents a promising area for future research, offering opportunities to enhance customer engagement and drive sales in the digital marketplace.

Keywords: Trust, perceived reliability, social influence, peer recommendation, buying behavior, online shopping

Introduction

India occupies a significant position on the global stage as the world's second-largest producer of textiles and garments, standing fifth in textile exports, which encompass apparel, home furnishings, and technical products. This sector plays a pivotal role in India's economy, contributing 2.3% to the GDP, 13% to industrial production, and accounting for 12% of exports. The textile industry is a major employer, with around 45 million individuals engaged in the sector, including 3.5 million in handloom activities. Ambitious plans aim to escalate this figure to an impressive \$300 billion by the nation's centennial in 2047.

The Indian textiles and apparel industry demonstrates strength across the entire value chain, spanning fiber, yarn, fabric, and apparel production. It boasts a diverse landscape, incorporating traditional handloom and handicrafts as well as wool and silk products, alongside a modern organized textile sector equipped with capital-intensive technology for mass production across spinning, weaving, processing, and apparel manufacturing. Cotton, a vital component, significantly impacts the livelihoods of approximately 6 million cotton farmers and engages 40-50 million people in associated activities such as processing and trade. India's trade in technical textile products is experiencing robust growth, positioning the country as a net exporter.

Exports of technical textile products witnessed a substantial increase from \$2.21 billion in 2020-21 to \$2.85 billion in 2021-22, marking a notable year-on-year growth rate of 28.4%.

The fiscal year 2021-22 witnessed a remarkable milestone in India's textiles exports, surpassing \$44 billion. India leads globally in cotton production, contributing 23% to the world's output, with the highest area under cotton cultivation, covering 39% of the global total. In the fiscal year 2021-22, India produced an impressive 90 lakh bales of raw jute. The overall market size of the Indian textile and apparel industry is estimated at around \$165 billion in 2022, with the domestic market constituting \$125 billion and exports contributing \$40 billion. Projections suggest a robust growth trajectory, with the industry's market size expected to reach \$350 billion by 2030, growing at a compounded annual growth rate (CAGR) of 10%.

The exceptional export performance in the fiscal year 2021-22, totaling \$44.4 billion in Textiles and Apparel, including Handicrafts, reflects a substantial increase of 41% and 26% over the corresponding figures in the fiscal years 2020-21 and 2019-20, respectively. As of the estimation for the year 2022-23, India's cotton production stands at 5.84 million metric tons, representing 23.83% of the world's cotton production of 24.51 million metric tons. Furthermore, India ranks as the second-largest consumer of cotton globally, with an estimated consumption of 5.29 million metric tons, constituting 22.24% of the world's cotton consumption of 23.79 million metric tons.

This research seeks to delve into the intricate dynamics of online consumer behavior, focusing specifically on two key dimensions: trust and perceived reliability, and social influence and peer recommendation.

Trust and perceived reliability stand as foundational pillars in shaping consumers' attitudes and behaviors within the online marketplace. Trust revolves around the confidence that consumers place in the integrity, security, and reliability of online retailers and transactions. On the other hand, perceived reliability encompasses consumers' perceptions regarding the consistency, dependability, and quality of the products or services offered online.

To delve deeper into these dimensions, this research aims to scrutinize various facets. Firstly, trust is examined as a fundamental element in establishing and maintaining successful online transactions. Factors such as website security measures, transparent policies, and positive past experiences contribute significantly to building trust among online shoppers. Secondly, perceived reliability is explored, encompassing aspects such as product descriptions, reviews, ratings, and the fulfillment of promises regarding delivery and customer service. Consumers are more likely to engage in transactions with online retailers they perceive as reliable and trustworthy.

In the digital realm, social influence and peer recommendation have emerged as potent drivers of consumer behavior. Social influence pertains to the impact that individuals and groups exert on the attitudes, beliefs, and behaviors of others, while peer recommendation involves endorsements or recommendations from friends, family, or acquaintances regarding products or services.

This research aims to explore the mechanisms through which social influence and peer recommendation influence buying behavior. Social influence operates through various channels, including social media platforms, online forums, and word-of-mouth communication. Consumers are influenced by the opinions, recommendations, and behaviors of their social networks, as well as by influencers and celebrities endorsing products. Similarly, peer recommendation plays a significant role, with consumers often relying on recommendations from their social circles when making purchasing decisions.

In conclusion, this research endeavors to shed light on the complex interplay of trust, perceived reliability, social influence, and peer recommendation in shaping consumers' buying behavior in online shopping. By gaining deeper insights into these dimensions, businesses and marketers can devise strategies to enhance consumer trust, leverage social influence, and harness the power of peer recommendation to drive sales and foster customer loyalty in the dynamic and competitive landscape of e-commerce.

1 Review of literature

(Vikkraman, P., & Sumathi, N. 2011; Gam, H. J., Cao, H., Farr, C., & Kang, M. 2010; Saluja 2016) endeavors to explore the influence of various factors such as monthly income, gender, and peer influence on consumer behaviors concerning clothing purchases. Findings from a poll conducted in Delhi suggest a general preference among customers to shop alongside friends and relatives, influenced by their choices as well as external factors like celebrities and media. The research highlights quality, brand, and comfort as primary standards affecting purchasing behaviors toward fashionable apparel. Interestingly, the study reveals that factors such as age, gender, education, and employment do not significantly influence customer purchasing behavior. Moreover, the poll indicates a positive attitude among Delhi clients towards trendy clothing firms, emphasizing the significance of consumer behavior throughout the shopping process, encompassing mental and emotional engagement across three phases: before, during, and post-consumption.

(Dolekoglu, C. O., Albayrak, M., Kara, A., & Keskin, G. 2008; Park, J. H., & Lennon, S. J., 2004; Solomon, M. R., & Rabolt, N. J. 2004; Shafi and Madhavaiah's, 2014) experimental study delves into the impact of demographic and consumer buying attributes on apparel buyer decisions. Their findings underscore the importance of various dimensions such as reference groups, retailer attributes, promotion, product attributes, revenue, and occupation in influencing apparel purchasing behavior. This suggests that apparel retailers should prioritize these attributes to enhance sales. Khetarpal and Anand (2014) emphasize the expanding demand for garments and the critical role of research in the apparel sector to leverage this potential. They stress the necessity for retailers and suppliers to understand customer behavior during the shopping process to better serve their customers.

(Anand, K. S., & Sinha, P. K., 2008; Halepete, J., Seshadri Iyer, K. V., & Chul Park, S., 2008 Gurunathan; Krishnakumar, 2013) examine the garment purchase behavior of Indian consumers, considering factors such as customer attributes, reference collections, shop characteristics, preference, and item-related factors. Their findings highlight the importance of attributes preference and reference clusters in clothes purchasing performance. Consumer behavior, as defined by Kuester (2012), encompasses the processes individuals, groups, or organizations undertake to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs, and the impacts of these processes on the consumer and society. Singh (2013) underscores the significance of dressing in a woman's life, stating that it plays a crucial role in shaping her personality and reputation, boosting self-confidence and vanity. Clothing's individuality allows individuals to express their preferences while adhering to tradition and culture.

(Dahiya, R. 2012 Mittal; Aggarwal, 2012) highlight the pivotal role of the consumer in public relations success, emphasizing the importance of understanding consumer behavior before, during, and after purchase. They underscore the significance of observational statements and demographic and psychographic characteristics in influencing branded apparel purchase decisions.

(Hsu, S. H., & Bayarsaikhan, B. E., 2012; Jusoh, Z. M., & Ling, G. H., 2012; Zarrad, H., & Debabi, M., 2012; Rajput, Kesharwani, and Khanna, 2012) discuss the evolution of the Indian garment industry, noting the availability of modern high-quality materials and diverse options to meet consumer demands. They find that Indian consumers prioritize factors like quality, comfort, and demographic traits over brand image in their purchasing decisions. Pandian, Varathani, and Keerthivasan (2012) identify Raymond, Peter England, and John Player as the top three preferred brands among respondents. Customers prioritize factors like durability, reference companies, color and design options, price range, and celebrity endorsement when purchasing men's branded shirts, expecting a wider range of choices and lower prices.

Vikkraman and Sumathi's (2012) study on the Indian garment industry sheds light on the significant antecedents of purchase intentions among Indian shoppers, emphasizing emotional worth and clothing interest as pivotal factors influencing preferences for both foreign and local brands. The research underscores the substantial impact of self-concept on consumer desires, suggesting that individuals with high self-esteem seek to express their individuality rather than conforming to societal norms. Additionally, the study highlights the influence of fashion interest on perceived quality and emotional worth, indicating a preference for global brands among Indian consumers due to their reputation symbols and confidence in foreign companies. Verma and Tiwari (2011) focus on high intelligence customers in the Indian context, offering insights into the criteria that universal and national goods may target to succeed in the Indian market. Their findings suggest a correlation between income level and brand preference, indicating a widening brand spectrum as income levels rise. Understanding these nuances can aid brands and sponsors in leveraging market opportunities effectively.

(Hernández, B., Jiménez, J., & José Martín, M. 2011; Im, H., & Ha, Y., 2011; Khare's, 2010) research delves into the awareness of trendy brands among consumers in developing nations, particularly focusing on the significance of fashionable clothing in Indian society. By studying Indian institution students, Khare uncovers the pervasive influence of branded trends and the increasing engagement with fashion apparel among both genders. Krishna (2011) explores the determinants of consumer buying behavior concerning private label brands in apparel retail, identifying factors such as brand recognition, sales promotions, framework, and store environment as significant influencers of customer choices. Interestingly, demographic characteristics like occupation and social phase were found to have minimal impact on purchasing behavior.

(Nazir, S., Tayyab, A., Sajid, A., ur Rashid, H., & Javed, I.; 2012; McCormick, H., & Livett, C. 2012; Rajagopal, 2010) investigates the determinants of consumer behavior and their influence on purchase intentions regarding fashion garments in the Indian context. His research highlights the role of communal-traditional and character-related factors in shaping consumer purchase intentions, underscoring the importance of self-theories and the desire for exclusivity in driving clothing desires. Kim et al. (2003) focus on the behavioral intentions approach to internet shopping for apparel, revealing insights into the predictors of consumer buying

behavior in online shopping contexts. Their study emphasizes the significance of insolence and independent values in predicting consumer behavioral intentions, indicating their crucial role in online apparel purchases.

(Kwon, W. S., & Noh, M.; 2010; Kim, J., & Damhorst, M. L.; 2010; Kim, H., & Niehm, L. S. 2009, Sproles and Kendall, 1986) introduce eight customer emotional aligned aspects, including fastidiousness awareness, brand awareness, and innovation and trend awareness, among others. These aspects provide a comprehensive framework for understanding consumer emotional factors influencing purchasing behavior. Based upon above literature following hypotheses have been proposed –

- H1** - There is a significant impact of Trust and perceived reliability on buying behavior in online shopping.
H2 - There is a significant impact of social influence and peer recommendation on buying behavior in online shopping.

2 Research Methodology

The nature of the study involved quantitative research aimed at investigating the relationships between latent variables (Trust, Perceived reliability, social influence, Peer recommendation) and their corresponding observed variables, as well as their impact on Buying Decision in the context of online shopping behavior. The sampling type employed in this study was non-probabilistic, given the specific focus on online shoppers. It utilized purposive sampling methods to select participants who met the criteria for the study.

Regarding the data collection technique, the study utilized a survey method administered online to gather responses from participants. The survey included items related to the observed variables (TO1, TO2, TO3, PR1, PR2, PR3, PR4, SIOBB1, SIOBB2, SIOBB3, SIOBB4, PROBB1, PROBB2, PROBB3, PROBB4, ONPDM1, ONPDM2, ONPDM3) measuring latent constructs (Trust, Perceived reliability, social influence, Peer recommendation, Buying Decision). Participants rated their agreement or frequency of behaviors on a Likert scale which were then analyzed using the specified estimation and optimization methods (ML and NLMINB). Furthermore, the data were collected from five districts of Haryana, namely Rohtak, Jind, Hisar, Mahendragarh, and Gurgaon. The data collection period spanned from July 2023 to November 2023.

3 Result and analysis

Table 1 - Models Info

| | |
|-------------------------------|--|
| Estimation Method | ML |
| Optimization Method | NLMINB |
| Number of observations | 300 |
| Model | Trust = ~TO1+TO2+TO3 |
| | Perceived reliability = ~PR1+PR2+PR3+PR4 |
| | Social influence = ~SIOBB1+SIOBB2+SIOBB3+SIOBB4 |
| | Peer recommendation = ~PROBB1+PROBB2+PROBB3+PROBB4 |
| | Buying Decision = ~ONPDM1+ONPDM2+ONPDM3 |
| | Buying Decision ~Social influence +Peer recommendation +Trust +Perceived reliability |

The provided information outlined a statistical model, presumably a structural equation model (SEM), which was employed to analyze the relationships between latent (unobserved) variables and observed variables. This model had utilized various parameters and methods for estimation and optimization. Specifically, the Maximum Likelihood (ML) method was employed for parameter estimation, while the NLMINB optimization method was utilized. A dataset comprising 300 observations was used for the analysis.

The model comprised several latent variables, each measured by a set of observed variables. For instance, the latent variable "Trust" was represented by three observed variables (TO1, TO2, TO3), while "Perceived reliability" was measured by four observed variables (PR1, PR2, PR3, PR4). Similarly, "Social influence" and "Peer recommendation" were each represented by four observed variables. Additionally, a latent variable termed "Buying Decision" was measured by three observed variables.

In summary, the statistical model employed in the analysis had integrated various parameters and methods to investigate the relationships between latent variables and observed variables. The results of this analysis shed light on the factors influencing the Buying Decision, emphasizing the interplay between latent constructs such as Trust, Perceived reliability, Social influence, and Peer recommendation.

Table 2 - Model Tests

| Label | X ² | df | p |
|-----------------------|----------------|-----|--------|
| User Model | 3637 | 125 | < .001 |
| Baseline Model | 7083 | 153 | < .001 |

Table 2 provided insights into the model tests conducted during the analysis. The table contained information regarding the chi-square (X^2) statistic, degrees of freedom (df), and associated p-values for two models: the User Model and the Baseline Model. The User Model exhibited a chi-square statistic of 3637 with 125 degrees of freedom, yielding a p-value of less than .001. Conversely, the Baseline Model showed a chi-square statistic of 7083 with 153 degrees of freedom, also resulting in a p-value of less than .001. These results indicate significant differences between the observed data and the expected values under both the User Model and the Baseline Model. The low p-values ($< .001$) suggest that the observed data significantly deviate from what would be expected under the null hypothesis in both models.

Overall, these model tests provide statistical evidence supporting the superiority of the User Model over the Baseline Model in explaining the underlying relationships among the variables analyzed.

Table 3 - Fit indices

| SRMR | RMSEA | 95% Confidence Intervals | | RMSEA p |
|--------------|-------|--------------------------|-------|----------|
| | | Lower | Upper | |
| 0.151 | 0.306 | 0.297 | 0.315 | $< .001$ |

Table 3 presented fit indices along with their corresponding 95% Confidence Intervals (CI) for the structural equation model. The fit indices included the Standardized Root Mean Square Residual (SRMR) and the Root Mean Square Error of Approximation (RMSEA), along with the lower and upper bounds of the RMSEA's 95% CI, and the p-value associated with the RMSEA.

The SRMR value was reported as 0.151, indicating a measure of the average absolute covariance residual per degree of freedom. Additionally, the RMSEA was reported as 0.306, which represents the discrepancy between the observed and model-implied covariance matrices, standardized for model complexity. The associated 95% CI for the RMSEA ranged from 0.297 to 0.315. Moreover, the p-value associated with the RMSEA was less than .001, indicating that the model's fit was significantly better than would be expected by chance alone.

Table 4 - Parameters Estimates

| Dep | Pred | Estimate | SE | 95% Confidence Intervals | | β | z | p |
|------------------------|-----------------------|----------|--------|--------------------------|-------|---------|-------|----------|
| | | | | Lower | Upper | | | |
| Buying Decision | Social influence | 1.218 | 0.1207 | 0.9811 | 1.454 | 0.735 | 10.09 | $< .001$ |
| Buying Decision | Peer recommendation | 0.73 | 0.0899 | 0.5536 | 0.906 | 0.359 | 8.12 | $< .001$ |
| Buying Decision | Trust | 0.561 | 0.2527 | 0.0652 | 1.056 | 0.374 | 2.22 | 0.027 |
| Buying Decision | Perceived reliability | 0.445 | 0.2516 | -0.0481 | 0.938 | 0.311 | 1.77 | 0.077 |

Table 4 presents parameter estimates along with their corresponding standard errors (SE), 95% Confidence Intervals (CI), standardized coefficients (β), z-values, and p-values for the structural equation model.

Buying Decision ~ Social influence: The estimated coefficient is 1.218, indicating that for each unit increase in Social influence, there is a corresponding increase of 1.218 units in Buying Decision. This relationship is statistically significant ($p < .001$).

- Buying Decision ~ Peer recommendation: The estimated coefficient is 0.73, indicating that for each unit increase in Peer recommendation, there is a corresponding increase of 0.73 units in Buying Decision. This relationship is statistically significant ($p < .001$).
- Buying Decision ~ Trust: The estimated coefficient is 0.561, indicating that for each unit increase in Trust, there is a corresponding increase of 0.561 units in Buying Decision. This relationship is statistically significant ($p = 0.027$).
- Buying Decision ~ Perceived reliability: The estimated coefficient is 0.445, indicating that for each unit increase in Perceived reliability, there is a corresponding increase of 0.445 units in Buying Decision. Although the relationship shows a trend towards significance ($p = 0.077$), it does not reach conventional levels of statistical significance.
- Overall, these parameter estimates provide insights into the strength and significance of the relationships between the predictor variables (Social influence, Peer recommendation, Trust, Perceived reliability) and the dependent variable (Buying Decision) in the structural equation model.

Figure 1 - Path diagrams

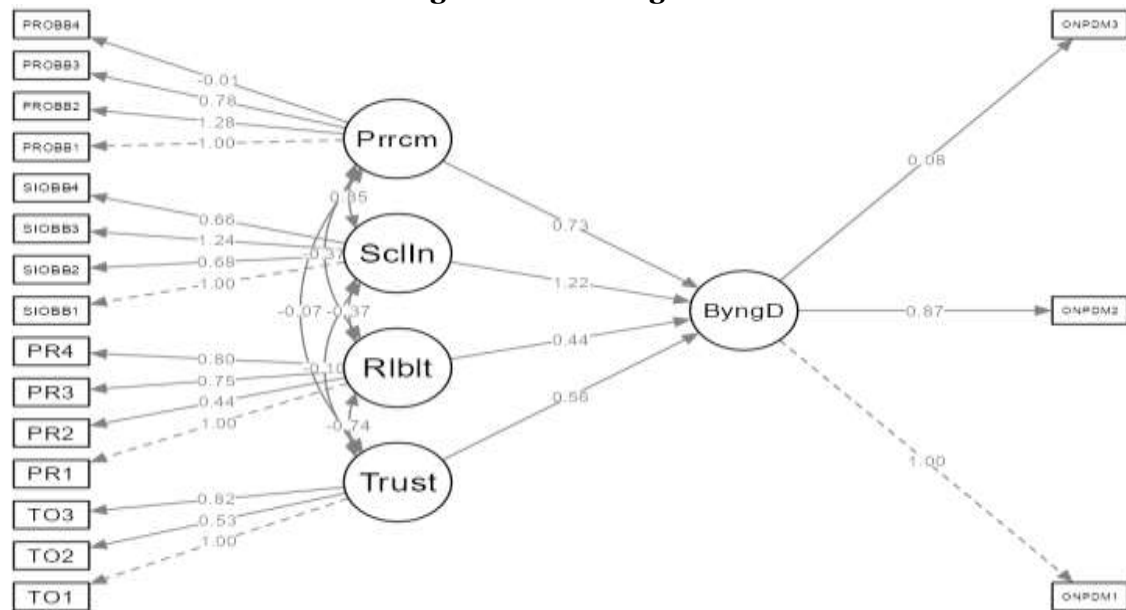


Table 5 - Measurement Model

| Latent | Observed | Estimate | SE | 95% Confidence Intervals | | β | z | p |
|-----------------------|----------|----------|--------|--------------------------|--------|---------|--------|--------|
| | | | | Lower | Upper | | | |
| Trust | TO1 | 1 | 0 | 1 | 1 | 0.75624 | | |
| | TO2 | 0.53072 | 0.0777 | 0.3785 | 0.683 | 0.45003 | 6.832 | < .001 |
| | TO3 | 0.81516 | 0.0952 | 0.6285 | 1.0018 | 0.572 | 8.561 | < .001 |
| Perceived reliability | PR1 | 1 | 0 | 1 | 1 | 0.86295 | | |
| | PR2 | 0.44496 | 0.0777 | 0.2927 | 0.5972 | 0.34459 | 5.727 | < .001 |
| | PR3 | 0.74819 | 0.0778 | 0.5958 | 0.9006 | 0.55218 | 9.62 | < .001 |
| | PR4 | 0.80368 | 0.0566 | 0.6928 | 0.9145 | 0.76657 | 14.21 | < .001 |
| Social influence | SIOBB1 | 1 | 0 | 1 | 1 | 0.75518 | | |
| | SIOBB2 | 0.6838 | 0.0633 | 0.5598 | 0.8078 | 0.45918 | 10.81 | < .001 |
| | SIOBB3 | 1.23941 | 0.0737 | 1.095 | 1.3839 | 0.7857 | 16.818 | < .001 |
| | SIOBB4 | 0.66465 | 0.0536 | 0.5597 | 0.7696 | 0.55075 | 12.407 | < .001 |
| Peer recommendation | PROBB1 | 1 | 0 | 1 | 1 | 0.61567 | | |
| | PROBB2 | 1.28404 | 0.1007 | 1.0868 | 1.4813 | 0.62729 | 12.756 | < .001 |
| | PROBB3 | 0.78202 | 0.0581 | 0.6682 | 0.8959 | 0.70184 | 13.462 | < .001 |
| | PROBB4 | -0.0073 | 0.0333 | -0.0726 | 0.058 | -0.0042 | -0.218 | 0.827 |
| Buying Decision | ONPDM1 | 1 | 0 | 1 | 1 | 0.95584 | | |
| | ONPDM2 | 0.86877 | 0.0185 | 0.8325 | 0.905 | 0.98489 | 46.993 | < .001 |
| | ONPDM3 | 0.08394 | 0.026 | 0.0329 | 0.135 | 0.18497 | 3.225 | 0.001 |

Table 5 presents the results of the measurement model, which aimed to assess the relationships between latent (unobserved) variables and their corresponding observed variables. The table includes estimates, standard errors (SE), 95% Confidence Intervals (CI), standardized coefficients (β), z-values, and p-values for each relationship.

- Trust: The observed variables TO1, TO2, and TO3 were used to measure the latent variable Trust. All three observed variables showed statistically significant relationships with Trust, with p-values < .001.
- Perceived reliability: The observed variables PR1, PR2, PR3, and PR4 were used to measure the latent variable Perceived reliability. All observed variables exhibited statistically significant relationships with Perceived reliability, with p-values < .001.
- Social influence: The observed variables SIOBB1, SIOBB2, SIOBB3, and SIOBB4 were utilized to measure the latent variable social influence. All observed variables displayed statistically significant relationships with social influence, with p-values < .001.
- Peer recommendation: The observed variables PROBB1, PROBB2, PROBB3, and PROBB4 were employed to measure the latent variable Peer recommendation. While PROBB1, PROBB2, and PROBB3 exhibited statistically significant relationships with Peer recommendation (p-values < .001), PROBB4 did not show a statistically significant relationship (p = 0.827).
- Buying Decision: The observed variables ONPDM1, ONPDM2, and ONPDM3 were used to measure the latent variable Buying Decision. ONPDM1 and ONPDM2 displayed statistically significant relationships

with Buying Decision (p-values < .001), whereas ONPDM3 showed a statistically significant relationship (p = 0.001).

Overall, these results provide insights into the strength and significance of the relationships between the observed variables and the latent variables they aim to measure within the structural equation model.

Table 6 - Variances and Covariances

| Variable 1 | Variable 2 | Estimate | SE | 95% Confidence Intervals | | β | z | p |
|------------------------------|-----------------------|----------|--------|--------------------------|---------|---------|-------|--------|
| | | | | Lower | Upper | | | |
| TO1 | TO1 | 0.7094 | 0.0991 | 0.5152 | 0.9037 | 0.4281 | 7.16 | < .001 |
| TO2 | TO2 | 1.0511 | 0.092 | 0.8708 | 1.2313 | 0.7975 | 11.43 | < .001 |
| TO3 | TO3 | 1.2949 | 0.1218 | 1.0563 | 1.5336 | 0.6728 | 10.63 | < .001 |
| PR1 | PR1 | 0.3564 | 0.0551 | 0.2484 | 0.4644 | 0.2553 | 6.47 | < .001 |
| PR2 | PR2 | 1.5275 | 0.1273 | 1.2779 | 1.777 | 0.8813 | 12 | < .001 |
| PR3 | PR3 | 1.3266 | 0.1162 | 1.0989 | 1.5543 | 0.6951 | 11.42 | < .001 |
| PR4 | PR4 | 0.4712 | 0.0502 | 0.3728 | 0.5696 | 0.4124 | 9.39 | < .001 |
| SIOBB1 | SIOBB1 | 0.5844 | 0.0405 | 0.505 | 0.6638 | 0.4297 | 14.42 | < .001 |
| SIOBB2 | SIOBB2 | 1.3574 | 0.0989 | 1.1635 | 1.5512 | 0.7892 | 13.72 | < .001 |
| SIOBB3 | SIOBB3 | 0.7386 | 0.0515 | 0.6376 | 0.8395 | 0.3827 | 14.34 | < .001 |
| SIOBB4 | SIOBB4 | 0.787 | 0.0557 | 0.6779 | 0.8961 | 0.6967 | 14.14 | < .001 |
| PROBB1 | PROBB1 | 0.8445 | 0.061 | 0.7249 | 0.9641 | 0.621 | 13.84 | < .001 |
| PROBB2 | PROBB2 | 1.3101 | 0.0948 | 1.1242 | 1.4959 | 0.6065 | 13.81 | < .001 |
| PROBB3 | PROBB3 | 0.3247 | 0.024 | 0.2778 | 0.3717 | 0.5074 | 13.55 | < .001 |
| PROBB4 | PROBB4 | 1.5796 | 0.129 | 1.3268 | 1.8324 | 1 | 12.25 | < .001 |
| ONPDM1 | ONPDM1 | 0.2013 | 0.0217 | 0.1587 | 0.2438 | 0.0864 | 9.27 | < .001 |
| ONPDM2 | ONPDM2 | 0.0497 | 0.0114 | 0.0273 | 0.0721 | 0.03 | 4.35 | < .001 |
| ONPDM3 | ONPDM3 | 0.4234 | 0.0346 | 0.3556 | 0.4912 | 0.9658 | 12.24 | < .001 |
| Trust | Trust | 0.9477 | 0.1464 | 0.6608 | 1.2345 | 1 | 6.48 | < .001 |
| Perceived reliability | Perceived reliability | 1.0395 | 0.1197 | 0.8049 | 1.2742 | 1 | 8.68 | < .001 |
| Social influence | Social influence | 0.7756 | 0.0971 | 0.5854 | 0.9658 | 1 | 7.99 | < .001 |
| Peer recommendation | Peer recommendation | 0.5155 | 0.0809 | 0.3569 | 0.6741 | 1 | 6.37 | < .001 |
| Buying Decision | Buying Decision | -0.0896 | 0.0538 | -0.1951 | 0.0159 | -0.0421 | -1.66 | 0.096 |
| Trust | Perceived reliability | -0.7385 | 0.0936 | -0.9219 | -0.5551 | -0.744 | -7.89 | < .001 |
| Trust | Social influence | -0.1025 | 0.0685 | -0.2367 | 0.0317 | -0.1195 | -1.5 | 0.135 |
| Trust | Peer recommendation | -0.0716 | 0.0594 | -0.1881 | 0.0448 | -0.1025 | -1.21 | 0.228 |
| Perceived reliability | Social influence | -0.3749 | 0.0697 | -0.5114 | -0.2384 | -0.4175 | -5.38 | < .001 |
| Perceived reliability | Peer recommendation | -0.3715 | 0.0632 | -0.4953 | -0.2477 | -0.5075 | -5.88 | < .001 |
| Social influence | Peer recommendation | 0.8465 | 0.086 | 0.678 | 1.015 | 1.3387 | 9.84 | < .001 |

Table 6 provides a comprehensive overview of the variances and covariances between variables within the structural equation model. The table furnishes estimates, along with their corresponding standard errors, 95% Confidence Intervals, standardized coefficients, z-values, and p-values, offering a detailed examination of the relationships among the observed and latent variables.

In dissecting the table, one can discern two primary categories of estimates: within-variable variances and between-variable covariances. Within-variable variances, exemplified by variables such as TO1, PR1, and SIOBB1, illuminate the spread of scores inherent within individual observed variables. These estimates offer a glimpse into the inherent variability encapsulated within each measure, providing crucial insights into the data's distribution and dispersion.

On the other hand, between-variable covariances, typified by pairs like TO1 - TO2, PR1 - PR2, and SIOBB1 - SIOBB2, unveil the degree of linear association existing between pairs of observed variables. By elucidating the extent of covariance between these variables, these estimates delineate the strength and direction of the relationships existing within the dataset, thereby facilitating a deeper understanding of the interplay between different constructs.

Furthermore, the table also presents estimates pertaining to latent variables, including their variances and covariances. Variances of latent variables such as Trust, Perceived reliability, and Social influence encapsulate the amount of variability inherent within these underlying constructs, shedding light on the dispersion of scores within each latent variable. Conversely, covariances between latent variables, such as Trust - Perceived reliability and Social influence - Peer recommendation, explicate the extent of linear association between pairs of latent constructs, unveiling the interconnectedness and interdependence among these latent constructs.

Overall, the estimates presented in Table 6 offer a comprehensive and nuanced portrayal of the relationships and variability both within and between observed and latent variables in the structural equation model. These insights serve as invaluable tools for researchers, enabling them to discern intricate patterns and relationships embedded within their data, thereby facilitating a more profound understanding of the underlying phenomena being studied.

Table 7 - Intercepts

| Variable | Intercept | SE | 95% Confidence Intervals | | z | p |
|-----------------------|-----------|-------|--------------------------|-------|--------|--------|
| | | | Lower | Upper | | |
| TO1 | 2.77 | 0.074 | 2.624 | 2.916 | 37.271 | < .001 |
| TO2 | 1.863 | 0.066 | 1.733 | 1.993 | 28.112 | < .001 |
| TO3 | 2.137 | 0.08 | 1.98 | 2.294 | 26.676 | < .001 |
| PR1 | 3.193 | 0.068 | 3.06 | 3.327 | 46.813 | < .001 |
| PR2 | 2.007 | 0.076 | 1.858 | 2.156 | 26.4 | < .001 |
| PR3 | 2.09 | 0.08 | 1.934 | 2.246 | 26.203 | < .001 |
| PR4 | 2.473 | 0.062 | 2.352 | 2.594 | 40.077 | < .001 |
| SIOBB1 | 3.2 | 0.067 | 3.068 | 3.332 | 47.527 | < .001 |
| SIOBB2 | 2 | 0.076 | 1.852 | 2.148 | 26.413 | < .001 |
| SIOBB3 | 2.1 | 0.08 | 1.943 | 2.257 | 26.182 | < .001 |
| SIOBB4 | 2.48 | 0.061 | 2.36 | 2.6 | 40.416 | < .001 |
| PROBB1 | 1.8 | 0.067 | 1.668 | 1.932 | 26.734 | < .001 |
| PROBB2 | 2.2 | 0.085 | 2.034 | 2.366 | 25.927 | < .001 |
| PROBB3 | 2.6 | 0.046 | 2.509 | 2.691 | 56.292 | < .001 |
| PROBB4 | 1.98 | 0.073 | 1.838 | 2.122 | 27.287 | < .001 |
| ONPDM1 | 2.5 | 0.088 | 2.327 | 2.673 | 28.368 | < .001 |
| ONPDM2 | 3.06 | 0.074 | 2.914 | 3.206 | 41.181 | < .001 |
| ONPDM3 | 1.96 | 0.038 | 1.885 | 2.035 | 51.272 | < .001 |
| Trust | 0 | 0 | 0 | 0 | | |
| Perceived reliability | 0 | 0 | 0 | 0 | | |
| Social influence | 0 | 0 | 0 | 0 | | |
| Peer recommendation | 0 | 0 | 0 | 0 | | |
| Buying Decision | 0 | 0 | 0 | 0 | | |

Table 7 offers a detailed examination of the intercepts within the structural equation model, providing valuable insights into the baseline expected values of both observed and latent variables. The intercepts serve as crucial reference points, representing the anticipated values of variables when all other factors within the model are held constant at zero.

In dissecting the table, one encounters two primary categories of variables: observed and latent. For observed variables such as TO1, PR1, and SIOBB1, the intercepts signify the anticipated values of these variables in the absence of any influence from other variables within the model. Take, for instance, the intercept for TO1, estimated at 2.77. This value indicates the expected outcome of TO1 when all other variables are at their baseline values, portraying a pivotal starting point for further analysis. Moreover, the statistical significance of these intercepts, as indicated by the associated p-values (< .001), underscores their reliability and robustness, bolstering their utility in empirical investigations.

Conversely, for latent variables like Trust, Perceived reliability, and Social influence, the intercepts are uniformly estimated as zero. This divergence stems from the nature of latent variables, which are constructs inferred from observed indicators rather than directly measured. Consequently, the intercepts for latent variables are not applicable in the traditional sense, but rather signify a theoretical starting point within the structural equation model.

Through the lens of Table 7, researchers gain invaluable insights into the foundational expected values of variables within the structural equation model, paving the way for more nuanced analyses and interpretations. By elucidating these baseline expectations, the intercepts offer a solid grounding for exploring the intricate relationships and dynamics at play within the dataset, thereby enriching the depth and breadth of empirical investigations.

4 Discussion and Conclusion

The primary objective of this study was to investigate the impact of trust, perceived reliability, social influence, and peer recommendation on buying behavior in online shopping. Through a detailed analysis of parameter estimates derived from the structural equation model, several key insights were uncovered.

Firstly, the findings revealed a significant positive relationship between social influence and buying decision, suggesting that consumers are influenced by external factors such as social networks, media, and peer opinions when making purchasing decisions online. This aligns with previous research by Saluja (2016), which highlighted the influence of factors like peer recommendation and social networks on consumer behavior in

clothing purchases. Additionally, the study by Vikkraman and Sumathi (2012) emphasized the role of social influence in shaping consumer preferences for both foreign and local brands, underscoring its significance in the online shopping context.

Secondly, peer recommendation emerged as another significant predictor of buying decision, indicating that consumers are inclined to trust recommendations from friends, family, or acquaintances when making online purchases. This finding resonates with the study conducted by Shafi and Madhavaiah (2014), which emphasized the importance of peer recommendations and reference groups in influencing apparel buyer decisions. Furthermore, the research by Gurunathan and Krishnakumar (2013) underscored the critical role of reference clusters and peer influence in clothes purchasing behavior among Indian consumers.

Moreover, trust was found to have a significant positive impact on buying decision, implying that consumers are more likely to engage in online transactions with retailers they perceive as trustworthy and reliable. This finding corroborates the insights from Mittal and Aggarwal (2012), who highlighted the importance of consumer trust in influencing branded apparel purchase decisions. Additionally, the study by Rajput, Kesharwani, and Khanna (2012) emphasized the significance of trust and reliability in the Indian garment industry, particularly in building customer loyalty and satisfaction.

Lastly, perceived reliability exhibited a trend towards significance in its relationship with buying decision, suggesting that while consumers value reliability in online transactions, its impact may not reach conventional levels of statistical significance. This finding resonates with the research conducted by Verma and Tiwari (2011), which emphasized the importance of reliability and consistency in targeting high intelligence customers in the Indian market.

In conclusion, the findings of this study provide valuable insights into the complex dynamics of online consumer behavior, highlighting the significant influence of social factors such as social influence and peer recommendation, as well as the importance of trust and reliability in shaping buying decisions. By aligning with previous studies, this research contributes to the existing body of knowledge in understanding consumer behavior in the online shopping context, ultimately aiding businesses and marketers in devising effective strategies to enhance customer engagement and drive sales in the digital marketplace.

5 Study implication

The implications drawn from the study's findings on the impact of social factors, trust, and reliability on consumer behavior in online shopping extend across various facets of the e-commerce landscape, presenting valuable insights for stakeholders ranging from businesses and marketers to policymakers and consumers. Firstly, for businesses and marketers operating in the online retail realm, understanding the dynamics of social influence and peer recommendation can be pivotal in crafting targeted marketing strategies. By harnessing the power of social networks and cultivating influencer partnerships, businesses can amplify brand visibility and credibility, thereby driving online sales. Moreover, prioritizing initiatives aimed at building trust and ensuring transactional reliability can cultivate customer loyalty and foster positive word-of-mouth referrals, ultimately bolstering long-term profitability.

E-commerce platforms stand to benefit significantly from the study's insights by optimizing their platforms to facilitate social sharing and peer recommendations. Integrating social proof elements such as customer reviews, ratings, and user-generated content can instill confidence and aid decision-making in the online shopping journey. Additionally, robust security measures and transparent policies can assuage concerns related to trust and reliability, fostering an environment conducive to seamless and secure online transactions. Policy makers can leverage the study's findings to inform regulatory frameworks and consumer protection measures within the e-commerce sector. Implementing guidelines that mandate transparent disclosure of product information, fair pricing practices, and effective dispute resolution mechanisms can bolster consumer trust and confidence in online transactions. Furthermore, initiatives aimed at promoting digital literacy and raising awareness about safe online shopping practices can empower consumers to make informed decisions and safeguard themselves against potential risks.

6 future scope of the study

Exploring the impact of emerging technologies such as artificial intelligence, augmented reality, and virtual reality on consumer behavior in online shopping represents a promising area for future research. Investigating how these technologies influence factors such as trust formation, product evaluation, and purchase intentions can offer valuable insights into the future of e-commerce and inform strategic investments by businesses and policymakers.

7 References

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
2. Anand, K. S., & Sinha, P. K. (2008). *Store Format Choice in an Evolving Market, a TPB Approach*. Indian Institute of Management.
3. Dahiya, R. (2012). Factors influencing online shopping behaviour of consumers in India—An exploratory study.
4. Dolekoglu, C. O., Albayrak, M., Kara, A., & Keskin, G. (2008). Analysis of consumer perceptions and preferences of store brands versus national brands: An exploratory study in an emerging market. *Journal of Euromarketing*, 17(2), 109-125.
5. Gam, H. J., Cao, H., Farr, C., & Kang, M. (2010). Quest for the eco-apparel market: a study of mothers' willingness to purchase organic cotton clothing for their children. *International Journal of Consumer Studies*, 34(6), 648-656.
6. Gurunathan, K. B., & Krishnakumar, M. (2013). Factors influencing apparel buying behaviour in India: A Measurement Model. *Paripex-Indian journal of research*, 2(3), 218-224.
7. Halepete, J., Seshadri Iyer, K. V., & Chul Park, S. (2008). Wal-Mart in India: a success or failure?. *International Journal of Retail & Distribution Management*, 36(9), 701-713.
8. Hernández, B., Jiménez, J., & José Martín, M. (2011). Age, gender and income: do they really moderate online shopping behaviour?. *Online information review*, 35(1), 113-133.
9. Hsu, S. H., & Bayarsaikhan, B. E. (2012). Factors influencing on online shopping attitude and intention of Mongolian consumers. *The Journal of International management studies*, 7(2), 167-176.
10. Im, H., & Ha, Y. (2011). The effect of perceptual fluency and enduring involvement on situational involvement in an online apparel shopping context. *Journal of Fashion Marketing and Management: An International Journal*, 15(3), 345-362.
11. Janardan, Y., Verma, J. P., & Tiwari, K. N. (2011). Plant growth promoting activities of fungi and their effect on chickpea plant growth. *Asian Journal of Biological Sciences*, 4(3), 291-299.
12. Jusoh, Z. M., & Ling, G. H. (2012). Factors influencing consumers' attitude towards e-commerce purchases through online shopping. *International Journal of Humanities and Social Science*, 2(4), 223-230.
13. Kendall, E. L., & Sproles, G. B. (1986). Learning Styles among Secondary Vocational Home Economics Students: A Factor Analytic Test of Experiential Learning Theory. *Journal of Vocational Education Research*, 11(3), 1-15.
14. Khare, A. (2011). Mall shopping behaviour of Indian small town consumers. *Journal of retailing and consumer services*, 18(1), 110-118.
15. Kim, H. B., Gon Kim, W., & An, J. A. (2003). The effect of consumer-based brand equity on firms' financial performance. *Journal of consumer marketing*, 20(4), 335-351.
16. Kim, H., & Niehm, L. S. (2009). The impact of website quality on information quality, value, and loyalty intentions in apparel retailing. *Journal of interactive marketing*, 23(3), 221-233.
17. Kim, J., & Damhorst, M. L. (2010). The mediating effect of perceived service risk on perceived value of internet apparel shopping: From the quality-risk-value approach. *Journal of Global Academy of Marketing*, 20(4), 307-318.
18. Krishna, C. V. (2011). Determinants of Consumer Buying Behaviour: An Empirical Study of Private Label Brands in Apparel Retail. *Vilakshan: The XIMB Journal of Management*, 8(2).
19. Kwon, W. S., & Noh, M. (2010). The influence of prior experience and age on mature consumers' perceptions and intentions of internet apparel shopping. *Journal of Fashion Marketing and Management: An International Journal*, 14(3), 335-349.
20. McCormick, H., & Livett, C. (2012). Analysing the influence of the presentation of fashion garments on young consumers' online behaviour. *Journal of Fashion Marketing and Management: An International Journal*, 16(1), 21-41.
21. Mittal, P., & Aggarwal, S. (2012). Consumer perception towards branded garments: A study of Jaipur. *International Journal of Research in Finance & Marketing*, 2(2), 566-583.
22. Nazir, S., Tayyab, A., Sajid, A., ur Rashid, H., & Javed, I. (2012). How online shopping is affecting consumers buying behavior in Pakistan?. *International Journal of Computer Science Issues (IJCSI)*, 9(3), 486.
23. Pandian, S. P. K., Varathani, S. N., & Keerthivasan, V. (2012). An Empirical study on consumer perception towards branded shirts in Trichy City. *International Journal of Marketing, Financial Services & Management Research*, 20.
24. Park, J. H., & Lennon, S. J. (2004). Television apparel shopping: Impulse buying and parasocial interaction. *Clothing and Textiles Research Journal*, 22(3), 135-144.
25. Rajagopal. (2010). Coexistence and conflicts between shopping malls and street markets in growing cities: analysis of shoppers' behaviour. *Journal of Retail & Leisure Property*, 9, 277-301.

26. Rajput, N., Kesharwani, S., & Khanna, A. (2012). Dynamics of female buying behaviour: A study of branded apparels in India. *International Journal of Marketing Studies*, 4(4), 121.
27. Saluja, D. (2016). Consumer buying behaviour towards fashion apparels-A case of Delhi. *Journal of Business and Management*, 2(1), 85-86.
28. Shafi, S. I., & Madhavaiah, D. C. (2014). An Investigation on Shoppers' Buying Behaviour Towards Apparel Products in Bangalore City. *Pacific Business Review International*, 6(8), 63-68.
29. Solomon, M. R., & Rabolt, N. J. (2004). Consumer behavior: In fashion. (No Title).
30. Vikkraman, P., & Sumathi, N. (2011). A study on consumer perception towards retail chains at trichy. *SMART Journal of Business Management Studies*, 7(2), 75-81.
31. Vikkraman, P., & Sumathi, N. (2011). Catchment of Customers for Fashion Apparels in India: A Discernment. *Asian Journal of Research in Business Economics and Management*, 1(3), 363-373.
32. Zarrad, H., & Debabi, M. (2012). Online purchasing intention: Factors and effects. *International Business and Management*, 4(1), 37-47.