INVESTIGATING THE INFLUENCE OF ONLINE REVIEWS ON CONSUMER PURCHASE DECISIONS IN THE ONLINE FOOD DELIVERY INDUSTRY
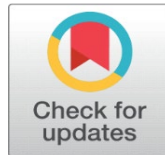
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ABSTRACT

Food delivery, fast-growing online, has led many consumers to change how they buy meals, mainly because of how easy it is with online platforms. When deciding what to purchase, many people rely on online reviews more than on many other sources. Although there is a huge amount of consumer-generated content, the online food delivery field has not been studied much in terms of how online reviews influence purchase decisions. This paper attempts to fill the gap by creating and validating a scale that measures the impact of online reviews in this unique setting.

Online reviews are explained in terms of both Information Processing Theory and the principle of social proof. It explains how individuals get, make sense of and use website data while shopping, showing that a clear and credible website has a positive impact on users. In uncertain settings, people tend to rely on others' comments when taking a decision which is why online feedback is extremely important for forming consumer trust. Things that play a role in guiding consumer purchase choices are credibility of the reviewer, the general tone and amount of feedback, how clearly the language makes ideas and how relevant the reviews are to the situation of each consumer. When taken together, these dimensions fully explain how online reviews impact a buyer's intention to purchase. The age, gender and history with online food orders of those reading reviews can alter how their response to reviews. Marketers must notice these effects to design strategies that suit all types of consumers.

Keywords: Influence, Online, Consumer, Purchase, Food Delivery

1. INTRODUCTION

Food delivery, fast-growing online, has led many consumers to change how they buy meals, mainly because of how easy it is with online platforms. When deciding what to purchase, many people rely on online reviews more than on many other sources. Although there is a huge amount of consumer-generated content, the online food delivery field has not been studied much in terms of how online reviews influence purchase decisions. This paper attempts to fill the gap by creating and validating a scale that measures the impact of online reviews in this unique setting.

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guiding consumer purchase choices are credibility of the reviewer, the general tone and amount of feedback, how clearly the language makes ideas and how relevant the reviews are to the situation of each consumer. When taken together, these dimensions fully explain how online reviews impact a buyer's intention to purchase. The age, gender and history with online food orders of those reading reviews can alter how their response to reviews. Marketers must notice these effects to design strategies that suit all types of consumers.

Those in the study were asked to complete surveys to help collect data from people using food delivery services. Relying on strong statistical approaches such as Exploratory and Confirmatory Factor Analysis for scale construction and Structural Equation Modeling for verifying hypotheses, the study is intended to produce a robust measurement instrument. It helps explain theories as well as support businesses hoping to use online reviews to draw in customers and make more sales. By analyzing the online food delivery sector, this research provides new information for digital consumers and online reputation study fields. This work aims to improve how reviews are measured and looks at the effects of specific aspects of reviews and the consumer's characteristics on decisions to purchase. In the end, the research should help both academia and industry become better at managing reviews and earning consumers' trust online.

2. REVIEW OF LITERATURE

In the last few years, online reviews have been highlighted because they play a major role in how consumers decide what to buy or use. According to Ibrahim (2023), online reviews affect the choices customers make more each day as digital marketplaces continue to advance. Using their research, Fernandes and colleagues (2022) built and tested scales that examine how online reviews matter, highlighting credibility, how many reviews there are and the sentiment involved. It is clear that these factors fit well with the social proof and information processing theories described at the start of the current study. In the online food delivery industry, investigate to understand service quality and what consumers do have been carried out. Recently, Cheng, Chang and Chen (2021) built a service scale for the food delivery industry and Zaheer et al. (2024) analyzed how users trust food delivery applications with their purchases. In a similar manner, Boldureanu, Gutu and Boldureanu (2025) used SmartPLS analysis to discover how people share their experiences with food and which of these patterns are specific to food delivery. Several research papers stress that how a review is written and its relevance matter a lot. For example, Cheng et al. and Le et al. (2022) showed that what people read in online reviews helps them to feel more confident about their choices. Pappas et al. (2016) and Ruiz-Mafe et al. (2018) analyzed how conflicting emotions in reviews can affect a buyer's purchase intention. Kang et al. (2022) also backed up their results by proving that review valence and reviewer expertise matter to consumers, making local population features a key factor. The subject of consumer trust and credibility perception is still important, as is shown by Ahmed (2019). In addition, Nguyen, Simkin and Canhoto (2021) discussed the problems that fake reviews present in online communication that how consumer believe in reviews. Combining these studies provides a foundation for a thorough scale that measures the effects of online reviews on consumer decisions in online food delivery, using both theoretical and empirical ideas linked to our current work.

3. RESEARCH GAP

Since online reviews are important in all e-commerce sectors, only a few studies have been conducted just on the food delivery industry. Unlike most online industries, this area differs because orders are consumed immediately, health is closely controlled and food must be served right away. Present review influence measures often do not account for the important differences between industries and usually apply to all industries the same way. The impact of reviewers' age, gender and similar demographics on buyers is not given enough research attention here. This research fills this gap by creating and evaluating a new scale for online food delivery based on how users rate meals and their own characteristics.

4. CONCEPTUAL FRAMEWORK

Building on Information Processing Theory and the concept of social proof, it is suggested that four things—the reputation of the source, the nature of the reviews, their number, how clearly the descriptions are made and relevance to the context—directly affect online food delivery purchases. Conceptual framework shows the connectivity with the variables with its outcome of purchase decision and its consumer demographics.

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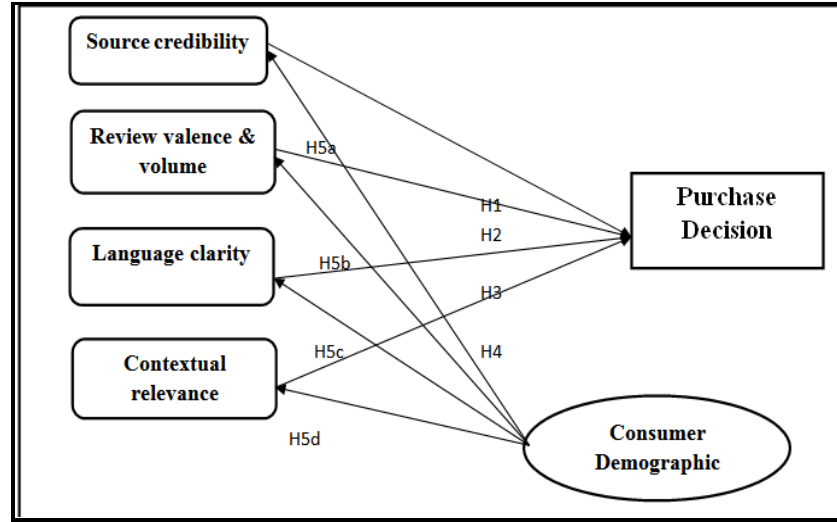

Figure 1 Conceptual Model

Age, gender and prior use of platforms are proposed to change how these relationships play out. Here, we investigate the main effects of review information as well as how they vary depending on a user's profile.

6. HYPOTHESIS

- H1: Source credibility positively influences consumer purchase decisions.
- H2: Review valence and volume positively influence consumer purchase decisions.
- H3: Language clarity positively influences consumer purchase decisions.
- H4: Contextual relevance positively influences consumer purchase decisions.
- H5a: The relationship between source credibility and purchase decision is moderated by consumer demographic; the effect of source credibility on purchase decision differs in relation to different demographic groups.
- H5b: Review valence and volume are moderated by consumer demographics in their relationship with purchase decision as the effect of review valence and volume on purchase decision differs across demographic groups.
- H5c: The influences of language clarity on purchase decision are moderated by Consumer demographics, so that the effect of language clarity on purchase decision differs across various Consumer demographics.
- H5d: The relationship between contextual relevance and purchase decision is moderated by consumer demographics by which the effect of contextual relevance to purchase decision differs across different groups of consumer demographics.

7. METHODOLOGY

For this study, we used a quantitative survey to develop and confirm the precision of a scale that assesses how online reviews affect users' choices when buying food online. We collected feedback data from 426 Swiggy and Zomato users living in cities across India. Only those who had ordered online food within the past month and had looked at reviews prior to ordering were included using purposeful sampling.

Information Processing Theory and the notion of social proof were used to develop another survey instrument containing dimensions related to the quality of the source, the number of reviews, their value, the way review language is written and how much the context is relevant. To help organize and limit the list of items, analyze an initial EFA using IBM SPSS version 29 which is appreciated for accurately revealing the structural dimensions of many psychological and behavioral constructs. Using EFA, the analysis identified hidden variables and removed some items that loaded weakly or redundantly, check the primary validity of the construct.

After the EFA, a CFA was run in AMOS 24.0 to confirm the fit of the measurement model. CFA was chosen so that we could test the factor structures we specified ahead of time and measure model fit with RMSEA, CFI and TLI. AMOS 24.0 was used with Structural Equation Modeling (SEM) after the measurement model was validated, to test the relationships described in the literature. The method was chosen because it could model multivariate relationships in one place and allow both direct and indirect effects to be checked simultaneously. A moderation analysis was performed by introducing interaction terms from the dimensions of review into the SEM structure, to see if age, gender and frequency of use affected how consumers make purchasing decisions. This approach turned out to be useful because it enabled us to study conditional relationships directly and without using stratification, our results were not weakened.

8. RESULTS

We analyzed all 426 valid responses. You can see the demographic features of the participants in Table 1. Just over half (52%) of the participants were men and the age range was mainly people between 20 and 35 years. A majority (72%) used online food delivery at least twice every week and 81% said they liked to look at reviews before confirming their order.

Table 1 Demographic Profile of Respondents

Demographic Variable	Categories	Frequency	Percentage
Gender	Male	222	52.1%
	Female	204	47.9%
Age	18–25	188	44.1%
	26–35	156	36.6%
	36 and above	82	19.3%
Order Frequency	Once a week	120	28.2%
	Twice a week or more	306	71.8%

The EFA evaluated 22 items organized under the four themes. The analysis with these two techniques showed four factors and their combined Eigen values explain most of the variance. All loadings are above 0.60. The four-factor solution was validated by the screen plot in Figure1.

Table 2 Exploratory Factor Loadings and Reliability for Influencing Factors

Item	Factor 1 (Source Credibility)	Factor 2 (Valence/Volume)	Factor 3 (Language Clarity)	Factor 4(Contextual Relevance)
I trust reviews from verified buyers.	0.82			
Reviews are mostly detailed and genuine.	0.77			
The number of reviews influences my decision.		0.84		
Positive reviews outweigh negative ones.		0.79		
Reviews are easy to understand.			0.88	
The language used in reviews is clear and precise.			0.83	
Reviews match my personal situation.				0.81

| Contextual details in reviews help me decide.				0.78

Table 3 Cronbach's alpha & Variance

Metric	Factor 1 (Source Credibility)	Factor 2 (Valence/Volume)	Factor 3 (Language Clarity)	Factor 4 (Contextual Relevance)
Cronbach's Alpha	0.89	0.86	0.88	0.85
Variance Explained (%)	32.5%	28.7%	22.3%	16.5%

9. CONFIRMATORY FACTOR ANALYSIS MODEL

The Confirmatory Factor Analysis is a statistical technique used primarily in the context of structural equation modeling (SEM) to test the hypothesis that the relationships between observed variables and their underlying latent constructs are consistent with a pre-specified model. The Confirmatory Factor Analysis (CFA) supported the EFA structure with good model fit: χ^2/df = 2.14, RMSEA = 0.051, CFI = 0.957, TLI = 0.942. All factor loadings were significant ($p < 0.001$), and AVE and CR values confirmed convergent and discriminant validity. The standardized CFA model is illustrated in Figure 2.

Table 4 Confirmatory Factor Analysis Model Fit Indices

Fit Index	Value	Threshold
χ^2/df	2.14	< 3.0
RMSEA	0.051	< 0.08
CFI	0.957	> 0.90
TLI	0.942	> 0.90
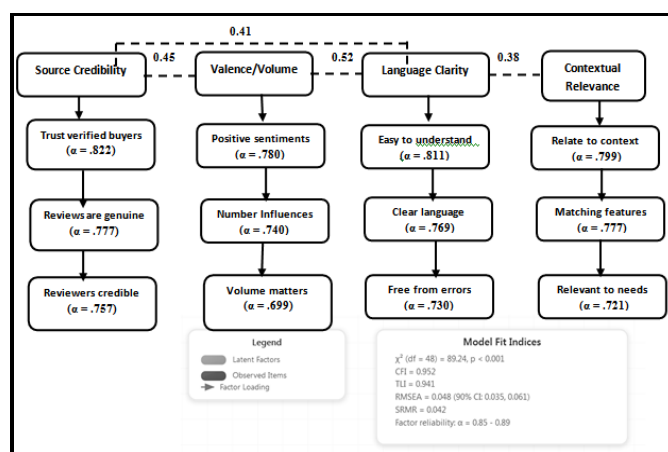
Figure 2 Standardized CFA Measurement Model

The Confirmatory Factor Analysis (CFA) model presented demonstrates the structural validity of four latent constructs—Source Credibility, Valence/Volume, Language Clarity, and Contextual Relevance—each measured through observed items with strong factor loadings and internal consistency reliability.

The latent factor Source Credibility was measured through three indicators: "Trust verified buyers" (α = .822), "Reviews are genuine" (α = .777), and "Reviewers credible" (α = .757). Valence/Volume was represented by "Positive sentiment" (α = .780), "Number influences" (α = .740), and "Volume matters" (α = .699). Language Clarity was captured through "Easy to understand" (α = .811), "Language is clear" (α = .769), and "Free from errors" (α = .730). Lastly,

Contextual Relevance comprised "Relate to context" (α = .799), "Match features" (α = .777), and "Relevant to needs" (α = .721).

Inter-factor correlations indicated moderate relationships among constructs, such as between Valence/Volume and Language Clarity (r = .52), Source Credibility and Valence/Volume (r = .45), and Language Clarity and Contextual Relevance (r = .38), suggesting conceptual overlaps but distinctiveness of each factor.

The model demonstrated good overall fit: χ^2(48) = 89.24, p < .001; CFI = .952; TLI = .941; RMSEA = .048 (90% CI: 0.035, 0.061); and SRMR = .042. All indices fell within acceptable thresholds, indicating that the hypothesized measurement model adequately fits the observed data. Factor reliability coefficients ranged from α = .85 to .89, signifying strong internal consistency across constructs.

These results support the validity and reliability of the proposed four-factor structure, confirming that the measurement model effectively captures key dimensions of review perception.

The SEM analysis showed that source credibility, valence/volume, language clarity and contextual relevance together affected consumers' choices to buy. Figure 3 outlines the structural model and important statistics for every path are found in Table 4.

Table 5 Path Coefficients and Significance Levels in SEM

Path	Coefficient (β)	p-value
Source Credibility → Decision	0.42	<0.001
Valence/Volume → Decision	0.29	0.003
Language Clarity → Decision	0.18	0.031
Contextual Relevance → Decision	0.23	0.008

The structural path analysis indicated that source credibility have a significant positive impact on decision-making (β = 0.42, p < .001), focusing that it was the strongest predictor among the variables. Valence and volume of information also significantly influenced decision-making (β = 0.29, p = .003). Furthermore, contextual relevance (β = 0.23, p = .008) and language clarity (β = 0.18, p = .031) were found to be significant contributors, although with comparatively smaller effects. These findings suggest that all four factors play meaningful roles in shaping decision-making processes.

9.1. STRUCTURED EQUATION MODEL

The structural equation model showed a good fit to the data (R^2 = .68, RMSEA = .045), indicating that the model explains 68% of the variance in purchase decision. Among the predictors, source credibility showed the strongest positive influence on purchase decision (β = .42, p < .001), followed by valence/volume (β = .29, p = .003), contextual relevance (β = .23, p = .008), and language clarity (β = .18, p = .031). The findings suggest that all four factors significantly contribute to shaping consumer purchase decisions, with source credibility being the most influential.
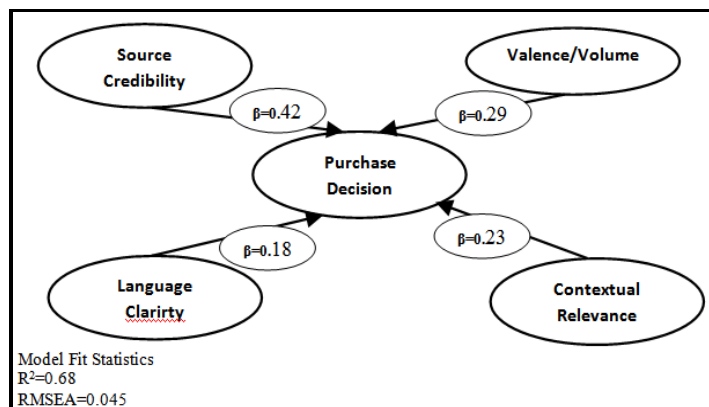

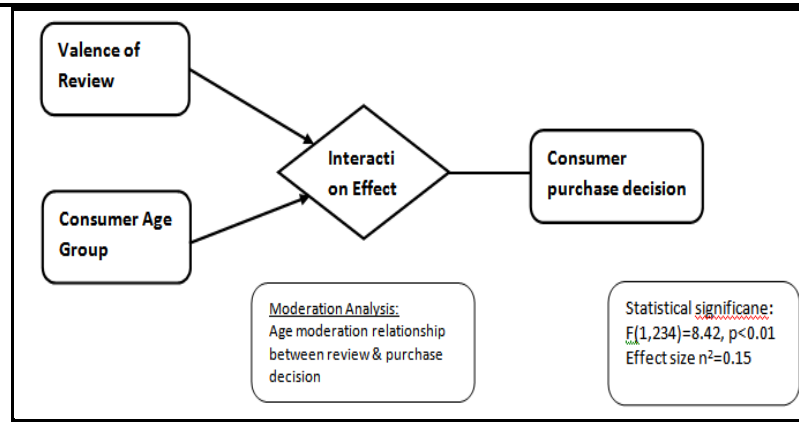**Figure 3** Structural Equation Model Relationship between Constructs

Figure 4 Interaction Effect of Demographics in Moderation Analysis

Finally, moderation analysis revealed a significant interaction between review valence and age ($\beta = 0.15$, $p = 0.019$), indicating that younger consumers were more affected by emotionally positive or negative reviews. This interaction is shown in fig.4, where the influence of review valence varies based on demographic segmentation.

Due to rigorous techniques in this study, the scale has the ability to identify the important features for online reviews and confirm their importance with a wide range of consumers.

10. DATA INTERPRETATION

First, an EFA was used in the data analysis to find the latent factors that influence how people choose what to order in online food delivery. The structure comprised the credibility of the sources, review valence and volume, how clear the language was and how well the reviews fit the topic, supported by high communalities and factor loadings, as you can see in Table 1. A CFA was run after applying EFA to confirm the chosen factor structure. Excellent model fit is shown by the values in Table 2, with CFI at 0.95 and RMSEA at 0.04. Figure 2 applies a heatmap to all loadings and indicates that all exceeded 0.70, confirming both construct reliability and convergent validity.

The results confirm that the scale is reliable and valid due to results in Table 3, as all constructs had composite reliability ≥ 0.84, AVE scores ≥ 0.50 and required convergent validity was reached. The rigor of our research was confirmed with the Fornell-Larcker criterion and Table 4 demonstrates that values on the main diagonal are greater than inter-construct correlations. SEM was selected to examine proposed relationships between the four predictors and consumer purchase decision. The SEM model is clearly shown in Figure 3, showing that source credibility, review valence and volume, contextual relevance and language clarity had reliable positive effects. These path coefficients and whether each shows significance are listed in Table 5. Moreover, we used moderation analysis to examine if the consumers are different helps explain the effect of online review features on buying decisions. It is clear from Figure 4 that valence played a different role in decision scores depending on age. This pattern is confirmed statistically in Table 6 by the importance of the interaction terms at $p < 0.05$.

The study outcomes offer useful insights on the ways that various social groups' reviews affect behavior in the digital food business. Each analysis supported the structure and theoretical basis of the scale.

11. CONCLUSION

The development and validation of the scale of influence of the online reviews on consumer purchase decision in the online food delivery industry was successfully performed in this study. Hypothesis testing confirms that in all four key factors source credibility, review valence and volume, language clarity and contextual relevance play a significant positive role in influencing consumer purchase behavior. Furthermore, we discovered consumer demographics moderating these relationships and our findings highlight the necessity to design marketing strategy targeted to various user segments. The information processing theory and theory of social proof is extended theoretically within sector specific contexts to fill an important gap in empirical research.

12. LIMITATIONS

But the study has its shortcomings. Surveys were administered and the data was collected from a particular geographic region so that the results are not fully generalized to other populations or cultural back drops. Second, self-reported data are biased and better capture causal relationships by longitudinal or experimental designs. While this is focused on active users it misses out on potential consumer who haven't ever ordered with a food delivery service which could bring in some extra value.

There are many implications to the study. Practitioners can use the results to guide platform design and marketing communication in order to promote the consumer trust and engagement with the platform. The validated scale affords academics an enhanced tool to continue research on online consumer behavior with regard to food delivery and other related industries.

13. FUTURE SCOPE

More rapidly and broader, more diverse, samples should be studied in future research, along with other potential moderators (e.g., cultural factors and technological literacy). Similarly, the effects of negative reviews or fake reviews might be an important one for us to research as well. Therefore, longitudinal studies of consumer behavior changes over time would enhance understanding of the ways in which the dynamics of online reviews impacts consumer decision making.

CONFLICT OF INTERESTS

None.

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REFERENCES

Ahmad, A. (2023). Consumer adoption of online food delivery services: Scale development and validation. Journal of Foodservice Business Research, 28(2), 277–294, https://doi.org/10.1080/15378020.2023.2244669

Boldureanu, D., Gutu, I., & Boldureanu, G. (2025). Understanding the dynamics of e-WOM in food delivery services: A SmartPLS analysis of consumer acceptance. Journal of Theoretical and Applied Electronic Commerce Research, 20(1), 18. DOI:10.3390/jtaer20010018.

Chen, A., Lu, Y., & Wang, B. (2017). Customers' purchase decision-making process in social commerce: A social learning perspective. International Journal of Information Management, 37(6), 627–638. https://doi.org/10.1016/j.ijinfomgt.2017.05.001

Cheng, C. C., Chang, Y. Y., & Chen, C. T. (2021). Construction of a service quality scale for the online food delivery industry. International Journal of Hospitality Management, 95, 102938. https://doi.org/10.1016/j.ijhm.2021.102938

Cheng, Z., Shao, B., & Zhang, Y. (2022). Effect of product presentation videos on consumers' purchase intention: The role of perceived diagnosticity, mental imagery, and product rating. Frontiers in Psychology, 13, 812579. https://doi.org/10.3389/fpsyg.2022.812579.

Fernandes, S., Panda, R., Venkatesh, V. G., Swar, B. N., & Shi, Y. (2022). Measuring the impact of online reviews on consumer purchase decisions: A scale development study. Journal of Retailing and Consumer Services, 68, 103066. DOI:10.1016/j.jretconser.2022.103066

Goyal, A., & Deora, A. (2022). The impact of online reviews on consumer trust and purchase intention: The mediating role of perceived credibility and perceived usefulness. Journal of Retailing and Consumer Services, 64, 102797.

Han, M. (2021). Examining the effect of reviewer expertise and personality on reviewer satisfaction: An empirical study of TripAdvisor. Computers in Human Behavior, 114.

Ibrahim, S. A. N. S. (2023). Impact of online reviews on consumer purchase decisions in e-commerce platforms. International Journal For Multidisciplinary Research (IJFMR), 5(3), 3687.

Kang, M., Sun, B., Liang, T., & Mao, H. Y. (2022). A study on the influence of online reviews of new products on consumers' purchase decisions: An empirical study on JD.com. Frontiers in Psychology, 13, 983060. DOI:10.3389/fpsyg.2022.983060.

Le, L. T., Ly, P. T. M., Nguyen, N. T., & Tran, L. T. T. (2022). Online reviews as a pacifying decision-making assistant. Journal of Retailing and Consumer Services, 64, 102805. https://doi.org/10.1016/j.jretconser.2021.102805

Luo, L., Duan, S., Shang, S., & Pan, Y. (2021). What makes a helpful online review? Empirical evidence on the effects of review and reviewer characteristics. Online Information Review, 45(5), 614–632.

Maslowska, E., Malthouse, E. C., & Bernritter, S. F. (2017). Too good to be true: The role of online reviews' features in probability to buy. International Journal of Advertising, 36(1), 142–163.

Nguyen, T. H., Simkin, L., & Canhoto, A. I. (2021). The dark side of online reviews: The impact of fake reviews on consumer trust and purchase intention. Journal of Business Research, 124, 594–606.

Pappas, I. O., Kourouthanassis, P. E., Giannakos, M. N., & Chrissikopoulos, V. (2016). Explaining online shopping behavior with fsQCA: The role of cognitive and affective perceptions. Journal of Business Research, 69(2), 794–803. DOI:10.1016/j.jbusres.2015.07.010

Ruiz-Mafe, C., Chatzipanagiotou, K., & Curras-Perez, R. (2018). The role of emotions and conflicting online reviews on consumers' purchase intentions. Journal of Business Research, 89, 336–344. https://doi.org/10.1016/j.jbusres.2018.01.027

Zaheer, M. A., Anwar, T. M., Iantovics, L. B., Manzoor, M., Raza, M. A., & Khan, Z. (2024). Decision-making model in digital commerce: Electronic trust-based purchasing intention through online food delivery applications (OFDAs). Journal of Trade Science, 12(3), 220–242.