

The impact of E-WOM Credibility on Perceived Risks: An empirical study on a sample of dishwasher buyers

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Abstract:

The purpose of this study was to investigate the effect of e-WOM credibility on reduction the buyers' perceived risk. Consequently, the current study developed a conceptual framework to explore the relationship between e-WOM credibility and perceived risk. Based on initial responses gathered from (383) buyers, S.E.M modeling was used to validate the conceptual model proposed. The results indicated that while e-WOM credibility was High, perceived risk was Medium. Furthermore, it showed that e-WOM credibility had no effect on lowering dishwasher buyers' perceived risks. For dishwasher manufacturing companies, these findings are crucial. They need to use different strategies, such as offering warranties and after-sale services, to lessen the perceived risk. Additionally, dishwasher manufacturing companies should provide potential customers with the information they require in a variety of ways, such as thorough detailed user guides and Explanatory videos, as opposed to allowing them to obtain information from informal electronic sources.

Keywords: E-WOM credibility, Performance risks, Financial risks, Social risks.

I- Introduction:

Perceived risk represents the uncertainty that a consumer feels when purchasing a product. It is related to the ambiguity that he or she experiences before purchasing any product. This type of risk occurs when a consumer perceives that a purchasing decision may cause a potential risk or chance of loss. It does not matter whether the perceived risks really exist or not. Perceived risks are always subjective in nature and vary from person to person. It may also vary from time to time. The degree of consumer's perceived risk increases whenever the price of the product to be purchased is high and requires significant involvement on his part in the purchasing process, such as cars, homes, computers, and complex devices.

The consumer usually tries to search for a lot of information about the product from many sources in order to decrease the extent of the risks he or she feels towards such product and increase his or her level of confidence. E-WOM is perceived as credible and trustworthy source of information, as it provides information related to the performance of the product from the user's point of view, as well as information about the social and psychological consequences that can result from purchasing decisions. Trust and credibility contribute to enhance the role of the recipient who plays a dual role in the process of transmitting and circulating the word of mouth, by receiving it and then transmitting it to other consumers. Thus, the word of mouth circulates among a larger number of consumers.

Electronic sources are among the most important sources of information that one can resort to due to the ease of access. Nowadays, in purchasing products process, consumers often look at information written by other consumers online; That is, they turn to electronic word of mouth (e-WOM). Today's market has been greatly influenced by the Internet, which has changed the way buyers make decisions about their purchases: they will no longer rely on information generated by marketers (ads or sales agent). Instead, they search for reviews on websites and find more information about the product or they check other consumer testimonials across e-commerce sites, look at other people's recommendations, and ask many questions about the potential product.

E-WOM is a powerful market force because the consumers find it to be an unbiased and trustworthy source of information about the potential product. Credibility is an important determinant of the level of message acceptance and learning. In cases where word of mouth is perceived to be biased or represent messages driven by illegitimate purposes other than consumer experiences, reviews and recommendations, its credibility will deteriorate.

✓ Background of the research problem:

The dishwasher machine is a complex and expensive product for the buyer, and therefore it is associated with a high degree of risk. This is what prompted many consumers who wish to purchase it to join special Facebook groups to collect information, with the aim of reducing the degree of risk by removing ambiguity: how to use, prices, best brands, and the problems that may arise during its use. ***Did the credibility of this electronic word of mouth affect the degree of risk perceived by the dishwasher machine buyer?***

✓ Research questions and hypotheses:

- **Research questions:** to answer the problem raised, the following two questions should be answered:
 - What is the level of buyers' beliefs of the e-WOM about the dishwasher machine circulating on Facebook groups?
 - What is the degree of risks associated with the dishwasher machine perceived by the buyers of the study sample?
- **Research hypothesis:** E-WOM among consumers are used as input into the consumer's purchasing decision-making process. In the pre-purchase stage, consumers search for information about the product by participating in WOMs that revolve around the potential product as a strategy to reduce risks (Abu Al-Naga, 2010- 2011, p. 598). When these e-WOMs are characterized by credibility, they will allow the expected risks to be further reduced, so thanks to the honest information that the consumer collects about the product/service, he/she will inevitably be able to reduce the uncertainty, which will enable him/her to effectively estimate the possibility of failure. We conceptualize that E-WOM has negative effect on perceived risks the following hypothesis can be suggested:
 - Electronic word-of-mouth credibility adversely affects perceived risks by dishwasher buyers.

✓ **Objectives and significance of the research:**

The current research aimed at examining the interaction between e-WOM and perceived risk. Structural equation modeling was used to test the correlation. The results were important, as manufacturing companies can benefit from the findings by relying on e-WOM to reduce perceived risks, which ultimately leads to actual purchases. In other words, incorporating the emerging role of electronic word of mouth in the digital marketing strategy of the companies.

1. The theoretical framework of the study.

1.1. Conceptual clarification of *Electronic word of mouth (e-WOM) credibility*:

✓ **E-WOM credibility definition:**

Word of mouth (WOM) among consumers refer to dialogues, personal recommendations, and informal communications that take place and concern everything related to the product, or are the advice and recommendations that consumers receive from others. However, electronic word of mouth (e-WOM) refers to the process of consumers sharing their reviews online and directing other consumers to support or oppose certain products. (Abu Al-Naga, 2010-2011, page 596).

However, e-WOM refers to the process by which consumers share their opinions online and influence other consumers to support or oppose certain products. This type of communication occurs by consumers providing suggestions or reviews, and exchanging experiences with other potential consumers about products, services, or brands (Savitri, Hurriyati, Wibowo, & Hendrayati, 2022, pp. 2-3). It refers to all informal communications

made over the Internet and related to the use of a products or services and addressed to both consumers and sellers (Castano & Escandon-Barbosa, 2022, p. 127). It is also defined as positive or negative data provided by actual or potential customers of a particular product or company and which is freely accessible via the Internet. (Daowd, A., et al., 2020, p. 03) . Hence, there have been many definitions presented for e-WOM between consumers in the literature, and each of them addresses this concept from a different angle, depending on its purpose, but most of these definitions tend to agree on the basic structure of the e-WOM and on the approved method of communication, which is the “Internet”.

In contrast, e-WOM credibility refers to the quality of the information or a source which may (or may not) lead to trusting intentions and/or behaviors (Weitzl, 2017, p. 115). While (Nechoud, Ghidouche, & Seraphin, 2021, p. 55) defines it as an individual's perception of recommendations and opinions as credible, accurate, and based on experience or facts. Therefore, if a source is considered credible, the recipient will believe the messages provided by that source.

These WOMs can be either negative, conveying reviews opposing the product, or positive, conveying reviews in favor of the product or the service. Many studies have proven that consumers respond asymmetrically to negative and positive WOM. Consumers are more likely to believe negative information than the positive ones. Most brand messages, for instance, tend to be positive, but when negative information distorts a positive message, it often attracts. Negative WOM has a stronger impact on consumer responses than the positive ones (Martensen & Mouritsen, 2016, p. 04).

- ✓ **E-WOM Credibility dimensions:** The following table shows the dimensions of e-WOM credibility from the point of view of a sample of researchers:

Table .1. E-WOM credibility dimensions

Author (year)	Dimensions
(Fang, 2014)	✓ Source expert ✓ Task attraction ✓ Social attraction ✓ Argument strength ✓ Recommendation rating
(BAHARUDDIN & YAACOB, 2020)	✓ Quality of information ✓ General rating given by others ✓ Recommendation Consistency
(Daowd, A., et al., 2020)	✓ Source credibility ✓ Source Style ✓ Argument Quality

(Bilgen & Farzaneh Soleimani, 2017)	✓ Expertness
	✓ Trustworthiness
	✓ Objectivity
	✓ Quality of inter relationship
(Castano & Escandon-Barbosa, 2022)	✓ Reputation of the medium
	✓ Amount of information
	✓ Quality of information
	✓ Experience

Source : Prepared by the researcher based on the mentioned references.

It is clear from the previous table that most studies dealt with the concept of e-WOM as a multidimensional construct, and each study identified a different set of dimensions that make up this concept. In this study, we will adopt the following dimensions:

- **Source expertise:** Source expertise refers to the degree to which a source is believed capable of making valid assertions. Expertise reflects the amount of knowledge an individual has about a field (Fang, 2014, p. 73). Source expertise refers to the amount of knowledge a source has about a product or service, as well as their ability and motivation to provide correct and truthful information. Previous research suggests that experts are more trustworthy than laypeople. In addition, the expertise of the source is not only an important aspect of its credibility, but is also an important component of the credibility of e-WOM. In other words, if an online source is perceived as credible, its reviews and recommendations are also likely to be perceived as credible by consumers (Marc-Julian Thomas, Bernd W. Wirtz, & Jan C. Weyerer, 2019, p. 06)
- **Argument strength:** The strength of the argument represents the informational aspect of the stimulus and reflects the extent to which the received information can persuade a person to believe something (Fang, 2014, p. 74). The strength of arguments influences the attitudes of message recipients in a social media context. Especially when customers find that the information matches their requirements and needs, they are ready to criticize the product value based on their purchasing criteria. If of e-WOM is perceived as valid information on the part of the recipient, they will establish a positive attitude towards the products/services that correlates with this electronic word of mouth. Conversely, if these opinions are considered invalid, the recipient of the message will have a negative attitude towards the product/service and eventually the strength of the argument will be considered unreliable (Daowd, A., et al., 2020, p. 10).
- **Recommendation Consistency:** Consistency refers to the degree to which a current recommendation is consistent with other recommendations about the same product or service experience. Reviews about an item or service generally

consist of more than one comment provided to consumers. Consumers can undoubtedly obtain reviews from various clients and analyze the consistency between these online exchanges (BAHARUDDIN & YAACOB, 2020, p. 337). When comparing e-WOM, consumers are more likely to perceive that e-WOM as more credible that show a high consistency with most of the other related Electronic word of mouth. By contrast, consumers are very likely to be more skeptical towards Electronic word of mouth that is not consistent with most of the other Electronic word of mouth (Marc-Julian Thomas, Bernd W. Wirtz, & Jan C. Weyerer, 2019, p. 5).

1.2. Conceptual framework of perceived risk:

✓ The concept of perceived risk:

Consumer behavior involves risk in the sense that any action by the consumer will result in consequences that are almost impossible for the consumer to foresee with certainty and at least some of which that can cause discomfort (Ross, 1975). Perceived risk is also defined as the possibility of negative consequences resulting from the decision taken (MACIEJEWSKI, 2012, p. 282). It has also been defined as a consumer's perception of the uncertainty and potential undesirable consequences of purchasing a product/service (Raman Amirtha, V. J. Sivakumar, & Yujong Hwang, 2021, p. 324). (MACIEJEWSKI, 2012, p. 284) went on to say that consumer risk can be defined as the possibility of a deviation from the expected state, which may be estimated more or less accurately. The deviation from the expected state is negative (possibility of loss, failure).

✓ Dimensions of perceived risks: perceived risk consists of a set of dimensions:

- **Performance risks:** refers to the state of the consumer's fear that the product will not match the benefits and advantages expected, and the difficulty to judge the quality of a product (Bezes, 2011, p. 406).
- **Financial risks:** refers to the fear that the product is not worth the price paid. It also includes fear of potential loss related to product failure, high repair costs, or feelings of loss due to products sold at a cheaper price elsewhere (Bezes, 2011, p. 406).
- **Social risks:** refers to the fear that the wrong choice of product will lead to the consumer being embarrassed as well as the product is not accepted by others (Shu, Wang, Lin, Jia, & Zhou, 2022).

✓ Methods of managing perceived risks in purchasing: The consumer seeks to use different methods to confront the potential risk when thinking about purchasing a commodity, and may adopt one of the following methods (Khalil, 2018, p. 102):

- **Gathering information:** The buyer tries to gather information about various brands from official and unofficial sources and friends to reduce the degree of risk before purchasing the product.

- **Purchasing the same brand:** Buyers can avoid a lot of risks when they buy the same brand instead of an untried brand.
- **Purchasing product with outstanding brand:** The buyer may tend to buy a product with outstanding brand; known and used by many consumers, because it is of higher quality and the user does not face problems related to its performance.
- **Store reputation:** Some buyers rely on the store reputation when they purchase the item, as they have information about the store as selling high-quality goods.
- **Money-back guarantee:** The consumer sometimes buys the item if he/she obtains guarantees, including the right to refund within a certain period of time if he/she is not satisfied.
- **Product sample:** Using a free sample of a consumer product before committing to a purchase.
- **Purchasing an expensive item:** There is a common issue among buyers, which is purchasing an expensive item to ensure its good quality.
- **Shopping:** To identify the commodity in shops in order to compare the goods offered in terms of quality, price, brand and other matters that concern the buyer.

2. The experimental framework for the study:

2.1. Methods and tools:

- ✓ **Research population and sample:** The research population included dishwasher's buyers who joined the following Facebook groups: Dishwasher and All Its Materials, Beko Dishwasher Algeria, Everything Related to Beko Dishwasher, If You Have a Dishwasher, welcome (Jordanian facebook group). 600 questionnaires were distributed electronically to a random sample, by adding comments below the posts in each group, where (383) were retrieved.
- ✓ **Statistical tools:** To analyze the field study data, reliance was placed on:
 - **Statistical Package of Social Sciences (SPSS):** Version No. 21. Appropriate statistical methods were used as follows: Mean, Standard Deviation, and Coefficient of Variation, where the level of e-WOM credibility and the level of perceived risks were determined by five levels.
 - **IBM SPSS Amos v23.0:** Appropriate statistical techniques were used, including Goodness of Fit (GOF) and Coefficient of Determination (R^2). The average variance extracted (AVE) was calculated and looked for values with an $AVE \geq .05$. This allowed assessing the convergent validity and confirming how the items connect to the relevant component. Additionally, the discriminant validity was evaluated, which determines if each component is sufficiently different from the others based on the

fact that each factor's AVE value is greater than the square of the relationship between the factors. In addition, the composite reliability was examined (CR), which provides an assessment of the factors' internal consistency. Hair et al. (2014) recommended using a cut-off point of $CR \geq .70$.

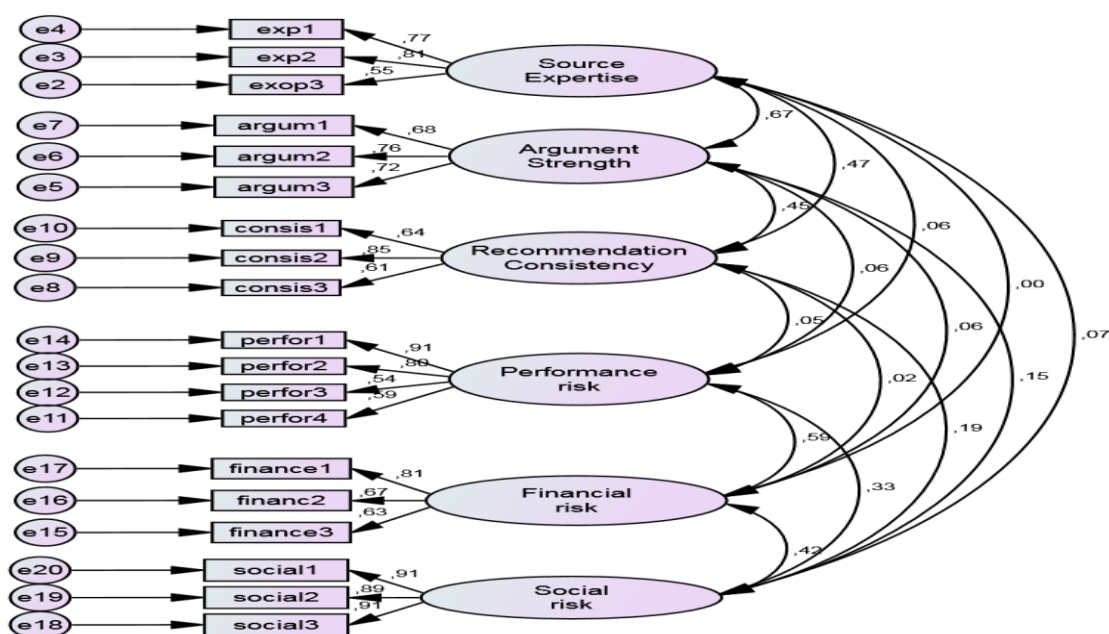
✓ **Data collection tool:**

A questionnaire was developed in a systematic manner, starting from a literature analysis aimed at identifying appropriate measurement criteria, which were adopted and modified when necessary according to the specific research context. e-WOM credibility was measured using items available in e-WOM credibility literature ((Fang, 2014); (Man Yee Cheung, Chuan Luo, Choon Ling Sia, & Huaping Chen, 2009); (Marc-Julian Thomas, Bernd W. Wirtz, & Jan C. Weyerer, 2019)). The perceived risk-related items were developed based on the definitions that were addressed.

The variables used were measured using 5-point Likert scale. A datasheet form contained 20 statements distributed over two (02) axes and six (06) dimensions. Each dimension was measured by a set of statements.

- **Reliability and validity:** In order to assess the reliability and validity of the constructs, the composite reliability (CR) and average variance extracted (AVE) are examined in addition to the factor loading of each questionnaire item. Therefore, the following figure 1 and table 2 is presented to summarize the reliability and validity analysis results:

Figure 1. Standardized individual parameters of the final model



Source: SPSS AMOS program

Table 2. Composite reliability and convergent and discriminant validity.

Factors	CR	AVE	Source	Argume	Recommendati	Performanc	Financi
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			Expertise	nt Strength	on Consistency	e risk	al risk
Source Expertise	0.777	0.540	-				
Argument Strength	0.764	0.519	0.4489	-			
Recommendation Consistency	0.747	0.502	0.2209	0.2025	-		
Performance risk	0.829	0.561	0.0036	0.0036	0.025	-	
Financial risk	0.748	0.501	0.00	0.0036	0.0004	0.3481	-
Social risk	0.930	0.816	0.0049	0.0225	0.0361	0.1089	0.1764

Source: Prepared by the researcher based on SPSS AMOS program

The findings shown in Table 2 demonstrate that the measurement model exhibits internal consistency values for every factor, as the composite reliability values are in the vicinity of the suggested threshold (.70). In terms of convergent validity, the findings also show that the measurement model performed well across the board, as seen by the AVE values above the generally advised threshold of $VEM \geq .50$. It can be concluded that the measurement model is distinguished by discriminant validity based on Tables 2 results and in light of the previously established criteria for discriminant validity. It should be mentioned that an item of the source expertise factor was deleted in order to arrive at these results.

3.2. Results and Discussion:

The research results were classified according to the sequence of the hypothesis and the questions contained therein, as follows:

✓ Results related to the answer of the first question:

The first research question was: What is the level of buyers' beliefs of the e-WOM about the dishwasher machine circulating on Facebook groups?

According to the above discussion, consumer e-WOM credibility refers to consumers' perception of recommendations and reviews as credible, valid, and based on experience or facts. Therefore, the data collected will shed light on the extent to which the study sample perceive that the recommendations and reviews of consumers in Facebook groups are credible, valid, and based on experience or facts. According to the data obtained, the degree of e-WOM credibility among buyers reached a high degree with an arithmetic mean of (3.51) on a 5-point Likert scale. The statistics in the following table uncover these results.

Table.3. The level of buyers' beliefs of the e-WOM about the dishwasher machine circulating on Facebook groups

Dimension	Mean	Standard Deviation	Coefficient of Variation	Degree
Source expertise	3.47	0.64	18.44	High
Argument Strength	3.67	0.59	16.07	High

Consistency	3.36	0.73	21.72	High
e-WOM credibility	3.49	0.51	14.61	High

Source: Prepared by the researcher based on SPSS program

The results in the above table indicate that the level of belief in e-WOM via Facebook groups among the dishwashing machine buyers was high, as it recorded an arithmetic average estimated at (3.49), which is located at the fourth domain, with a weak dispersion with a coefficient of variation estimated at (14.61%). This confirms the convergence of the views of the interviewed dishwasher machine buyers regarding the credibility of e-WOM through Facebook groups.

This result can be attributed to the fact that most of the organizers of these groups have had the experience of purchasing and using a dishwasher, so they have sufficient experience so that can make buyers who are looking for information believe their reviews and recommendations. They also presented strong and convincing arguments while giving their reviews or advices. They often used pictures and videos explaining the product's advantages or problems besides other information. Additionally, the reviews and recommendations of the group members are often characterized by consistency regarding the advantages of the machine and how to use, notwithstanding the fact that they do not agree with reviews regarding the best brand, as each member believes that the brand that he or she purchased and satisfied with is the best. This was confirmed by the result of consistency, which recorded the lowest level compared to the other two dimensions, along with dispersion strength that was also recorded the highest level.

✓ Results related to the answer of the second question:

The second research question was: What is the degree of risks associated with the dishwasher machine perceived by the buyers of the study sample?

In order to answer this question, arithmetic mean, standard deviation, and coefficient of variation will be used. The following is a table displaying all the results related to that:

Table .4. The degree of risks associated with the dishwasher machine perceived by the buyers of the study sample

Dimension	Mean	Standard Deviation	Coefficient of Variation	Degree
Performance risks	3.42	0.89	26.02	High
Financial risks	3.53	0.85	24.07	High
Social risks	2.10	1.16	55.23	Weak
Perceived risks	3.01	0.75	24.91	Medium

Source: Prepared by the researcher based on SPSS program

As can be seen from the results in the table above, the level of perceived risks among the study sample was average, as it recorded an arithmetic mean of (3.01), which falls in the third domain, with a weak dispersion with a coefficient of variation of (24.91%). This confirms the convergence of the reviews of the buyers questioned about risks.

As for the level of availability of each type of risk, the latter will be discussed as follows:

The level of financial risks was high. When thinking deeply about this result, it can be noticed that “*financial risks*” are the most recognized by the buyers of the study sample. This axis contains statements that measure the buyer's fear concerning dishwashing machine, as it is not worth the price paid, or that the product will be cheaper elsewhere, in addition to his or her fear of high repair costs. This result can be attributed to the fact that the price of dishwashing machines is considered high, especially the imported product, in addition to the price variation from one store to another, besides the high repair costs, especially those related to the imported products.

As for “*performance risks*,” which also recorded a high level, this is due to buyers’ fear that the machine will not be able to clean the utensils well. There are a lot of negative posts about it. Some members post pictures of utensils that were not cleaned well, and others noticed dirty with lime. Some of them also post about baskets quick rust forming. All this made the questioned buyers feel a greater degree of risk.

As for the third dimension, an interesting situation was encountered. It was found, on the one hand, that the level of both financial risk and performance risk is high, and on the other hand, that the level of social risks is low. Its dispersion is considered the strongest as well. These results indicate that there is a division among buyers regarding the perception of this type of risk, as some perceive a high degree of social risk while others perceive a low degree. Some posts indicate that some buyers fear that their failure to choose the best product will lead to embarrassment in front of their families in addition to the critics will receive. While others, especially female employees, declare that they are free to make their purchasing decisions and do not have any fears in front of the family or the social environment.

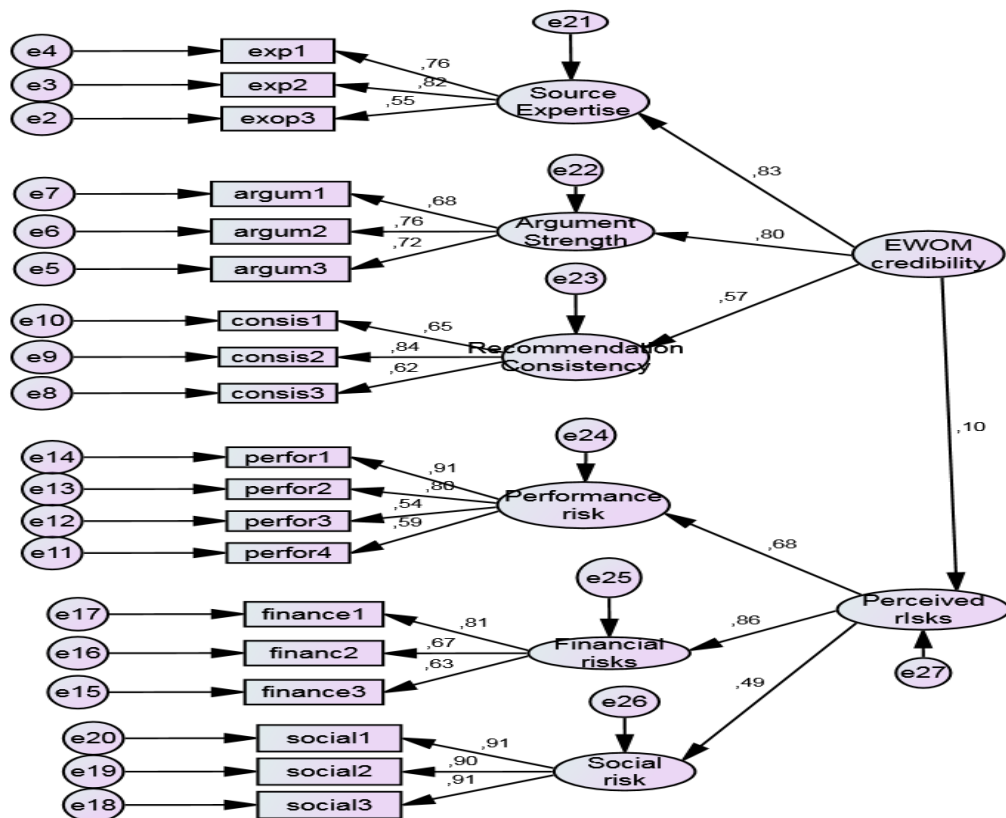
✓ **Results related to testing the study hypothesis:**

The study hypothesis stated the following: Electronic word-of-mouth credibility adversely affects perceived risks by dishwasher buyers.

For the purpose of verifying the validity of this hypothesis, the conformity of the structural model with the data related to the study sample with the aim of studying its credibility in terms of validity and reliability, on the one hand, and the validity of the adopted structural model using IBM SPSS Amos v23.0, on the other hand, were verified. All the results related to this were shown below:

- **Goodness of Fit (GOF) test:** GOF of the model was tested, but did not achieve the required results, so two modifications were made based on the proposals presented by the program, so all indicators of GOF reached the acceptable range. The results came as shown in Figure 1 and Table 2, as follows:

Fig.2. GOF of the model



Source: SPSS(AMOS) program results

The following table shows the results of GOF indicators that were relied upon to estimate the GOF of the study model:

Table .5. of GOF indicators

Indices	cmin/df	RMSEA	SRMR	CFI	TLI
Model GOF	2.074	0.054	0.0589	0.947	0.938
Results	Accepted	Accepted	Accepted	Accepted	Accepted

Source: Prepared by the researcher based on SPSS(AMOS) program

The indicators mentioned in the previous table were relied upon to ensure the quality of matching the study model with the field data according to what was suggested by Hu and Bentle, as they are among the most effective indicators that have proven effective (Tighza, 2012).

It is clear from the previous table that all the values of the indicators that were used to judge the goodness of fit of the model came in the acceptable range, as the ratio of Chi-square to the Degree of Freedom (CMIN/df) was (2.074) in the acceptance range between 1 as a MIN value and 3 as a MAX_value. The root mean square error of approximation (RMSEA) was estimated at (0.054), which is much less than (0.08), indicating that the model therefore has a good fit. As for the Standardized Root Mean Square Residual

(SRMR), its value was estimated at (0.0589), which is also within the acceptable range, while the model recorded values of (0.947) and (0.938) respectively for the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI), which are two values that exceed the acceptance limit, estimated at a level of (0.9). Hence, the result in the end indicates that the model matches the data of the study sample, and accordingly this means that it represents the best model in explaining the data of the current study.

Based on the results of GOF of the structural model used, and since it achieved a good fit index, it can be relied upon to prove or disprove the validity of the study hypothesis.

Also, Figure 2 summarizes the results related to the hypothesized structural correlations, and shows that the path coefficient reflecting the impact of e-WOM credibility in reducing perceived risks is not statistically significant. Therefore, this result disproves the main research hypothesis regarding the adverse impact of e-WOM credibility on perceived risk. The very weak path coefficient for the independent variable also indicates that it has no correlation with reducing perceived risks.

The previous discussion reveals an interesting result. Although the credibility of e-WOM was high, it did not play a role in reducing the perceived risk of dishwasher machine buyers, contrary to the initially assumed trend. This result can be attributed partially to the characteristics of e-WOM disseminated via Facebook groups, which range from negative to positive. Therefore, it was not able to reduce the risks perceived by the washing machine buyer, as it led to a decrease and an increase from time to time. Perhaps what confirms this result on reality is that although some beginners buy a dishwasher machine, they post inquiries about whether their decision was correct or not. This indicates their continued experience a sense of risk regarding the product.

4. Conclusion:

Perceived risk is one of the primary drivers in consumer behavior. Studies have confirmed that when converting customers who are just looking for products/services into actual buyers, it is important to understand their perceived risks and try to reduce them. This study presented firstly an analysis of some of the literature on e-WOM credibility and perceived risks, in order to ensure a good conceptual definition of the study variables and address the dimensions that make up each of them.

Primary study data analysis was secondly performed using structural equation modeling to assess the validity of the measurement model. The results confirmed the reliability and validity of the measurement model. Then, its results were relied upon to test the hypothesis.

Finally, based on the results of the field study, it was concluded that the level of buyers' belief in e-WOMs was high, and the level of buyers' perceived risks related to purchasing a dishwasher machine was also high. The results therefore disprove the proposed hypothesis. They indicate that the credibility of e-WOM does not lead to a reduction in the perceived risks related to purchasing a dishwasher machine.

Management implications:

Since e-WOM credibility has not had a positive impact on reducing the perceived risks among the dishwasher machine buyers, it is important for the dishwasher manufacturing companies to overcome the situation and use different strategies, such as offering warranties and after-sale services, to reducing the perceived risk. Additionally, dishwasher manufacturing companies should provide potential customers with the information they require (such as product features, how to use, causes of malfunctions and how to avoid, and prices) in a variety of ways, such as thorough detailed user guides and Explanatory videos to explain how to use it and how to solve all kinds of errors, rather than relying solely on electronic sources, as opposed to allowing them to obtain information from electronic sources, which, despite its credibility, did not contribute to reducing their perceived risks, which is one of the most important reasons that turns potential purchase into actual purchase.

Limitations and Directions for Future Research

Overall, no study is able to cover all the features and angles, hence every study has limitations, but these limitations also provide good scope for future studies. The current study found that there is no impact of e-WOM credibility in reducing the perceived risks in purchasing a dishwasher. It would be interesting to explore the factors that would reduce the perceived risks associated with purchasing a dishwasher. Future researchers may also explore the impact of buyer characteristics such as gender, social class, and age on perceived risks associated with a dishwasher.

Bibliography:

1. Abu Al-Naga, M. (2010-2011). Contemporary marketing issues. Egypt: University House.
2. Amhamed Bouziane Tigza. (2012). Exploratory and confirmatory factor analysis, their concepts and methodology, using SPSS and LISREL packages. Jordan: Al Masirah.
3. Weitzl, W. (2017). Measuring Electronic Word-of-Mouth Effectiveness: Developing and Applying the eWOM Trust Scale. Germany: Springer Fachmedien Wiesbaden.
4. Baharuddin, N., & Yaacob, M. (2020). Dimensions of eWOM Credibility on the Online Purchasing Activities among Consumers Through Social Media. Malaysian Journal of Communication, 36(03).
5. Bezes, C. (2011). Types de risques perçus et réducteurs de risques dans le commerce électronique : le cas du site Fnac.com. Revue management & Avenir, 48(8). DOI: <https://doi.org/10.3917/mav.048.0404>
6. Bilgen, I., & Farzaneh Soleimani, Z. (2017). A Research on the Impact of eWOM Source Credibility and Personal Innovativeness on Online Shopping Intention in Turkish Customers. Journal of Management, Marketing and Logistics . DOI: 10.17261/Pressacademia.2017.458 .
7. Castano, R., & Escandon-Barbosa, D. (2022). WOM Credibility and eWOM Credibility and their Consequences for Engagement. Int. J. Business Environment, 13(02). DOI: <https://doi.org/10.1504/IJBE.2022.121991>
8. Daowd, A., Hasan, R, Eldabi, T., Rafi-Ul-Shan, P. M., Cao, D, & Kasemsarn, N. . (2020). Factors Affecting eWOM Credibility, Information Adoption, and Purchase Intention on Generation Y: A Case from Thailand. Journal of Enterprise Information Management. <https://doi.org/10.1108/JEIM-04-2019-0118>
9. Fang, Y.-H. (2014). Beyond the Credibility of Electronic Word of Mouth: Exploring eWOM

- Adoption on Social Networking Sites from Affective and Curiosity Perspectives. *International Journal of Electronic Commerce*, 18(03). <https://doi.org/10.2753/JEC1086-4415180303>
10. Laila Jar Allah Khalil. (2018). The effect of reference groups in reducing perceived risks when purchasing: An exploratory study of a sample of car tire users in the city of Mosul. *Rafidaban Development journal*, 37(119). <https://doi.org/10.33899/TANRA.2018.159432>
 11. Maciejewski, G. (2012). The Meaning of Perceived Risk in Purchasing Decisions of the Polish Customers. *Journal of Economics & Management*, 08.
 12. Man Yee Cheung, Chuan Luo, Choon Ling Sia, & Huaping Chen. (2009). Credibility of Electronic Word-of-Mouth: Informational and Normative Determinants of On-Line Consumer Recommendations. *International Journal of Electronic Commerce*, 13(04). <https://doi.org/10.2753/JEC1086-4415130402>
 13. Marc-Julian Thomas, Bernd W. Wirtz, & Jan C. Weyerer. (2019). Determinants of Online Review Credibility and Purchase Intention. *Journal of Electronic Commerce Research*, 20(01).
 14. Martensen, A., & Mouritsen, J. (2016). Using the Power of Word-Of-Mouth to Leverage the Effect of Marketing Activities on Consumer Responses. *Total Quality Management & Business Excellence*, 27(7-8). DOI: <https://doi.org/10.1080/14783363.2016.1187996>
 15. Nechoud, L., Ghidouche, F., & Seraphin, H. (2021). The Influence of eWOM Credibility on Visit Intention: An Integrative Moderated Mediation Model. *Journal of Tourism, Heritage & Services Marketing*, 7(1). DOI: <https://doi.org/10.5281/zenodo.4521314>
 16. Raman Amirtha, V. J. Sivakumar, & Yujong Hwang. (2021). Influence of Perceived Risk Dimensions on e-Shopping Behavioural Intention among Women—A Family Life Cycle Stage Perspective. *Journal of Theoretical and Applied Electronic Commerce Research*, 16. doi: <https://doi.org/10.3390/jtaer16030022>
 17. Ross, I. (1975). Perceived Risk and Consumer Behavior: a Critical Review. *Advances in Consumer Research*, 2.
 18. Savitri, C., Hurriyati, R., Wibowo, L., & Hendrayati, H. (2022). The impact of eWOM information credibility, eWOM information quality, eWOM attitude toward information on eWOM information usefulness: a case of fashion product in market place. *International Journal of Entrepreneurship*, 26(1).
 19. Shu, T., Wang, Z., Lin, L., Jia, H., & Zhou, Z. (2022). Customer Perceived Risk Measurement with NLP Method in Electric Vehicles Consumption Market: Empirical Study from China. *Energies*, 15(1637).