FACTORS AFFECTING FEMALE ONLINE PURCHASE DECISION

Mahmoud Saleh Allan [*], Mohammed L. Ashour [**], Nafez Nimer Ali [*],
Ahmad N. Al Warasneh [***]

* Department of Marketing, Faculty of Business, Al Zaytoonah University of Jordan, Amman, Jordan
** *Corresponding author,* Department of Marketing, Faculty of Business, Al Zaytoonah University of Jordan, Amman, Jordan
Contact details: Department of Marketing, Faculty of Business, Al Zaytoonah University of Jordan, P. O. Box 130 Amman 11733, Jordan
*** Al Zaytoonah University of Jordan, Amman, Jordan

Abstract

This study enhances the existing literature on female online buying decisions by evaluating the factors shaping women's clothing purchase decision-making. Hence, it investigates the influence of social media interactive marketing activities, i.e., electronic advertising (e-Ads), electronic word of mouth (e-WOM), interaction (Int.), and content credibility (CC), on female purchase decisions. The study adopted the logic of quantitative approach using an e-questionnaire as a main data collection tool targeting online female consumers. Data were collected from 388 female social media users, and regression analysis was applied. The results of the study confirmed the association between a firm's use of interactive marketing applications and activities and female purchase decisions. In addition, the results pointed out the electronic interactive activities of social media platforms such as e-Ads, CC, and e-WOM as powerful tools that support firm's marketing strategies via their positive influence on female purchase decisions. The result is consistent with previous research (Park, Hyun, & Thavisay, 2021; Tran, 2017). The study provides several implications and recommendations for practice: focusing on content credibility, enriching the interactive content of brand name page, providing more details about offerings, and the continuous development of advertising, contents, and techniques. And for future research, as this study derived its findings from an evaluation carried out in the Jordanian clothing market, it is recommended to extend this evaluation to be conducted in other contexts and to consider other demographical and economic variables.

Keywords: Social Media Platforms, Interactive Marketing Activities, Female Purchase Decision

Authors' individual contribution: Conceptualization — M.S.A. and M.L.A.; Methodology — M.S.A. and A.N.A.W.; Formal Analysis — M.L.A., N.N.A., and A.N.A.W.; Resources — M.L.A., N.N.A., and A.N.A.W. Writing — Original Draft — M.S.A. and M.L.A.; Writing — Review & Editing — M.S.A., M.L.A., and A.N.A.W.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

Social media platforms play a crucial role in today's life. Virtual communities have become a major trend in our online behavior and a growing number of people spend more time on social networking platforms sharing ideas and interacting with new people.

The last decade witnessed a remarkable demand for the use of social media activities and applications. Today, the number of such platforms' users reached approximately 4.20 billion around the world and exceeded 6.3 million users in Jordan with a growth rate of 11% between 2020 and 2021 (Kemp, 2021).

Social media are interactive computer-mediated technologies that allow the creation or sharing/ exchange of information, ideas, career interests, and other forms of expression via virtual communities and networks (Obar & Wildman, 2015). The rapid growth of communication technologies associated with the accelerating rate of Internet penetration has allowed users to interact easily with groups of people from anywhere in the world via their computers or cell phones (Astatke, Weng, & Chen, 2021).

Online interactive applications are diverse. Facebook is the most popular social media platform. Such great popularity and widespread use has presented its implementations as a hot research topic because of the high penetration rate it has as a preferred tool by customers to search and share information about different products, services, and brands (Ali, Hussin, & Dahlan, 2019).

Furthermore, the widespread use of Facebook has contributed to creating an interactive environment that helps customers participate and interact with other users and customers about various issues, products, and services (Kwok, Mao, & Huang, 2019).

As other many countries worldwide, since the beginning of the COVID-19 crisis in the last third of March, 2020, various economic sectors in Jordan have faced severe damage in general, due to the closures of commercial sectors, including the clothing industry. This prompted consumers to search for nontraditional methods in order to obtain products.

This led to an increase in the number of online shopping buyers, especially female online consumers, which reached 41% of users. Such dynamic changes motivated marketers of women's clothing to rely more on social media platforms to present their offerings and to communicate with customers in order to maintain/increase their market shares.

This study seeks to answer the following questions:

Q1: What is the influence of social media interactive marketing activities on consumers' purchase decisions?

Q2: Is there any impact of consumers' gender on online purchasing behavior?

Q3: What is the influence of the moderator variables namely; the material status and income on the relationship between interactive marketing activities and female purchase decisions.

To conclude, this research work aims to investigate the association between the use of interactive marketing activities of social media platforms and female consumers' purchase decisions through identifying the impact of electronic advertising (e-Ads), electronic word of mouth (e-WOM), interaction (Int.), and content credibility (CC), on women's clothing online purchase decisions.

The importance of this research work stems from the nature of its context as it is carried out in an emerging economy — the Jordanian clothing market. Emerging market economies are still an increasingly attractive target for companies looking to expand. Simultaneously, there is a genuine need for more research to understand the online shopping behaviors and preferences of consumers in emerging economies (Islam, Anjum, & Ahmed, 2021). Thus, this research is significant for various reasons. It provides valuable insights into a relatively unexplored research area in an emerging market. Additionally, it focuses on tracking the major trend in consumers' online behavior and its related factors in the virtual communities and social networking platforms. Thus it is keeping pace with the environmental and technological developments of today's dynamic markets.

Contrary to many previous studies (Wibowo, Chen, Wiangin, Ma, & Ruangkanjanases, 2021; Park et al., 2021; Cheung, Pires, Rosenberger, Leung, & Ting, 2020; Weismueller, Harrigan, Wang, & Soutar, 2020; Ziyadin, Doszhan, Borodin, Omarova, & Ilyas, 2019) which report results from mixed samples where the influence of consumers' gender on the online purchase decision has not been given the attention it deserves, the present research is focused on evaluating the factors shaping female online purchase decision-making.

Because of the biological, neurological, and behavioral variations between men and women, purchasing behavior of women differs from that of men. (Ramprabha, 2017). However, female purchasing behavior was poorly evaluated in most related research and the impact of interactive marketing activities on the socio-economic dimensions of purchase decision represents a distinct gap in purchase decision literature (Kose & Arslan, 2020) especially in emerging market economies (Nguyen et al., 2019; Umamaheswari & Kumar, 2018). Hence, a comprehensive study on women's purchasing behavior is still needed.

Consequently, this research work considers the variation in the purchasing behavior between women and men and evaluates the influence of social media interactive marketing activities, i.e., electronic advertising (e-Ads), electronic word of mouth (e-WOM), interaction (Int.), and content credibility (CC), on female purchase decision. It also explores the moderating effects of demographic characteristics (income and material status) on the association between interactive marketing activities and online purchase behavior.

In addition, this research while examining the relationship between each of the interactive marketing activities — as contemporary marketing techniques — and female purchase decision and its related demographic moderating variables, intends to provide marketers with practical guidance on how to design and implement their marketing communications programs in today's highly competitive market.

The theoretical framework introduces and describes the theory that explains why the research problem under study exists (Abend, 2008). In order to address the study aim of gaining further insight into the association between interactive marketing activities, and female purchase decisions, a theoretical framework was proposed through the inclusion of four independent variables related to the interactive marketing activities in addition to the dependent factor that is represented in a female purchase decision.

Moreover, the effect of two moderating variables (income and material status) on the relationship between the independent variables and the female purchase decision was considered too.

Furthermore, the present study adopted the logic of the quantitative approach using an e-questionnaire because of its flexibility as the main instrument for the data collection process. The used questionnaire included 35 statements focusing on different aspects of an online purchase decision. Data were collected from 388 female social media users, and regression analysis was applied.

The study findings pointed out the electronic interactive activities of social media platforms such as e-Ads, CC, and e-WOM as powerful tools that support firm's marketing strategies via their positive influence on female purchase decisions.

This research paper is divided into five sections. Section 1 gives an overview of the paper and paves the way for understanding its purpose and objectives. In Section 2, the authors accomplished an in-depth evaluation of the related literature of the dimensions that constitute the research theoretical framework. In addition, the research proposed hypotheses which are illustrated in this section. While Section 3 outlines the methodology employed in the research and describes the used instrument, sampling methods, and techniques, Section 4 serves the purpose of summarizing the outcomes of the data analysis process. Conclusions and managerial implications are represented in Section 5 which sets out the complete picture of the research and consolidation of the results. It is mainly concerned with highlighting the findings relevant to the key factors that influence the online female purchase decision. In addition, several implications and recommendations are also provided in this section.

2. LITERATURE REVIEW AND HYPOTHESES

2.1. Interactive social media marketing activities

Starting with the emergence of social media, electronic advertisement (e-Ads) slightly changed the traditional uses of advertising in more sophisticated and effective ways.

Social media provided the environment and platform needed to build and execute advertising campaigns related to the communications goals of the organization (Gordon et al., 2020).

The concept of advertising indicates that it is one of the elements of the promotional mix, paid by a known entity to promote the product, service, goods, or idea (Kerr & Richards, 2020). Related literature defined advertising as a means of communication with the users of a product or service. It is a paid, non-personal activity, consisting of information about products and services transmitted through various media aimed at persuading consumers to obtain a service or goods.

Advanced technology allows marketers to personalize their messages to consumers and enables them to differentiate from their competitors and enjoy a niche advantage in the industry.

According to Yu and Natori (2020), the traditional definitions of advertising are no longer appropriate because of the rapid development of technology. Thus, advertising can be described as "personal intellectual property developed through earned, owned, and paid communication channels, activated by an identified or difficult-to-identify source intent on persuading viewers directly, indirectly, or unwittingly to expend energy, time, or emotion (but not money), resulting in behavioral change either now or in the future" (Yu & Natori, 2020, p. 100).

Arora and Agarwal (2019) pointed out the importance and value of social media advertising in being able to inform consumers of information about alternative products and thus enable to create a balance between the needs of consumers and the organization and thus the market is more efficient. In other words, advertising is a way to influence consumer purchasing behavior, as Alalwan (2018) explained. Moreover, as related literature indicated the positive effect of advertising on consumer's purchasing behavior it also highlighted the positive influence of advertising on consumer's attitude, as stated by Tran (2017).

The first null hypothesis is as follows:

$H1_0$: There is no statistically significant impact for electronic advertising (e-Ads) on a female purchase decision.

The concept of e-WOM refers to a positive or negative statement issued by customers, consumers, or users of social networking platforms on products or services or a case issued by business organizations and companies across social networking platforms (Ali et al., 2019). Ziyadin et al. (2019) discussed the difference between online-WOM and offline-WOM. Online-WOM is defined by the social and functional characteristics of the brand, while offline-WOM is defined by the emotional characteristics of the brand, based on a large set of data about the WOM brand's online and offline settings.

While Lee, Phua, and Wu (2020) examined the effects of Facebook reaction icons on e-WOM intention towards a health brand, the study conducted by Park et al. (2021) highlighted the powerful role of social media WOM in enhancing luxury brands purchase intention.

In addition, Mahmud, Islam, Ali, and Mehjabin (2020) clarified that the importance of e-WOM as a major tool for exchanging information across social media platforms is due to its flexibility and low costs that prompted marketers to increase interest in it. Social media and the Facebook platform have a way for marketers to promote brands to increase awareness and build relationships with customers, which prompted marketers to develop effective methods to attract customers' attention to interact through comment, share, and like, which led to the spread of the e-WOM more widely.

The second null hypothesis is as follows:

$H2_0$: There is no statistically significant impact of electronic word of mouth (e-WOM), on a female purchase decision.

Social media interaction is an umbrella term that encompasses all the two-way conversations and touchpoints that occur between companies and consumers. Interaction is one of the most important activities which is associated with social media platforms. Thus, interactive activity has witnessed an increase in recent times due to the progress in information technology and internet applications,

which was reflected in the increased awareness of customers towards products, services, and brands (Alalwan, 2018).

Yadav and Rahman (2017) defined social media interaction as the use of social media platforms to collaborate, share information and have conversations about ideas and issues we care about.

Interaction contributes to influencing the direction of intent to purchase a product/service or brand, as Zhang, Phang, Wu, and Luo (2017) argued. Thus, there is a positive relationship between interaction and the intention of buying where more interaction on the social media platforms will increase purchase intent among customers.

The third null hypothesis is as follows:

H3$_0$: There is no statistically significant impact of interaction (Int.) on a female purchase decision.

The increase in content published through social media has led to the emergence of concerns by users and customers towards the credibility of the content and its publisher, which in turn is reflected in a positive or negative attitude of users towards the product. Hence, the role of content credibility (CC) has emerged as a prominent aspect that contributes to enhancing confidence in the product (Weismueller et al., 2020). Arora and Agarwal (2019) stated that the concept of CC refers to the understanding of consumer claims and information relating to the brand, product, or service that has been promoted and advertised as honest and reliable.

In addition, Shareef, Mukerji, Dwivedi, Rana, and Islam (2019) explained the importance of CC in enhancing brand trust and building a positive attitude. The credibility of content and information provided towards a brand or product has an influential impact on customers' purchasing behavior, as well as having an impact on the reputation and trust of organizations. Therefore, the related literature recommended that marketers need to pay more attention to such effective elements when using social media platforms.

The fourth null hypothesis is as follows:

H4$_0$: There is no statistically significant impact of content credibility (CC) on a female purchase decision.

2.2. Purchase decision

The early work of Dewey (1910) attempted to present an answer for the questions (*how we think?*) which laterally constituted a base for the research on the explanation of the stages of the purchase decision-making process which comprises identifying the problem, searching for a satisfactory solution, evaluating possible alternatives, making a purchase decision, and evaluating the purchase decision. Thus, Dewey's work (1910) helped marketers to understand consumers' purchasing behavior in order to obtain a product (Richard, Cleavenger, & Storey, 2014).

Qurashi and Alkalainy (2015) introduced the concept of the purchasing decision as a series of activities and processes carried out by an individual or organization to purchase and choose a product or service with the aim of satisfying needs and wants.

In the same context, Karimi, Papamichail, and Holland (2015) defined purchasing decision as a behavioral pattern of the consumer that identifies and tracks the process of making the purchase decision, which consists of several stages in order to reach the product that satisfies his needs and desires.

To conclude, the concept of purchase decision represents the steps that the consumer takes to obtain and use the appropriate service/product (Widyastuti & Said, 2017).

2.3. Moderating variables

A moderator is an independent variable that influences the strength and/or direction of the connotation between another independent variable and an outcome variable (Lai, 2013).

The term moderating variable refers to a variable that can strengthen, diminish, negate, or otherwise alter the association between independent and dependent variables (Allen, 2017). Thus, it occurs when the effect of an independent variable on a dependent variable varies according to the level of a third variable, which interacts with the independent variable (Edwards & Lambert, 2007). Based on the above discussion, the following hypotheses have been proposed:

H5$_0$: There is no statistically significant impact of income (as a moderator variable) on the relationship between online marketing activities and a female purchase decision.

H6$_0$: There is no statistically significant impact of material status (as a moderator variable) on the relationship between online marketing activities and a female purchase decision.

Moderating variables could be classified into two main groups: 1) categorical variables such as ethnicity, race, religion, favorite colors, health status, or stimulus type, and, 2) quantitative variables such as age, weight, height, income, or visual stimulus size (Allen, 2017).

It is worth noting that all of the above sub-hypotheses were derived from the main hypothesis that combines the interrelationships of all components of the model:

H$_0$: There is no statistically significant impact of online interactive marketing activities on a female purchase decision.

2.4. Study model

Based on the assumptions of related literature, the researchers developed a research theoretical framework that included the independent variables related to the interactive marketing activities namely: electronic advertising (e-Ads), the electronic word of mouth (e-WOM), the interaction (Int.), and the content credibility (CC), in addition to the dependent factor that is represented by the female purchase decision.

Moreover, the effect of two moderating variables (income and material status) on the relationship between the independent variables and the female purchase decision was considered as shown in Figure 1 below.

Figure 1. Research model
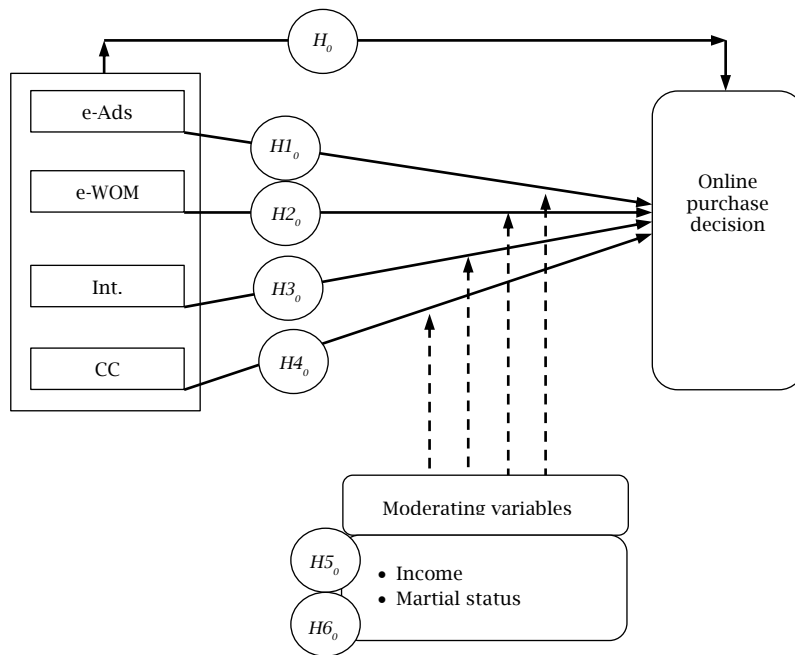
3. METHODOLOGY

The research was exploratory, intending to gain more insight into the relationship between interactive marketing activities and online female purchase decisions. Quantitative research is widely used in economics and marketing, aiming to discover patterns and relationships between variables. The present study adopted the logic of quantitative approach and primary data were gathered through an online questionnaire because of its low costs and flexibility, and secondary data were collected from various academic journals and government publications. The online questionnaire was distributed through e-mail and WhatsApp groups.

Female social media users make up the study's population and a convenience sample technique was used.

For research in marketing, a sample size of 30 to 500 is considered sufficient (Crimp & Wright, 1995). Hence, a number of (388) valid questionnaires were gathered.

The used questionnaire included 35 statements focusing on the four dimensions of interactive marketing activities, moderating variables, and the online female purchase decision.

According to Davis (1992) to maximize the likelihood of content validity of data collection tool, it is recommended to consult academics and experts. Hence, a number of colleagues and marketing experts were consulted about the formulation of the measurement tool and ensuring its compatibility with the statistical analysis software. As a result, the wording of some statements was modified, some statements were added and some were deleted.

The Statistical Package for the Social Sciences (SPSS) software was used to perform the quantities analysis and to test the hypotheses.

Consistent with related literature, income is viewed as a quantitative moderator variable, and material status is a categorical moderator variable (Allen, 2017). Thus, the effect of income and material status on the relationship between the independent and the dependent variable(s) was evaluated using a regression coefficient.

3.1. Reliability test

Reliability refers to the consistency of a measure by calculating the value of Cronbach's alpha, where the result is statistically acceptable if its value is greater than 0.70 (Sekaran & Bougie, 2016).

Table 1. The reliability of the scale using Cronbach's alpha

Variables	Cronbach's alpha
Interaction (Int.)	0.832
Electronic word of mouth (e-WOM)	0.773
Content credibility (CC)	0.870
Electronic advertising (e-Ads)	0.744
Interactive marketing activities	0.915
Purchase decision	0.845

As shown in Table 1, Cronbach's alpha values related to the scale items ranged from 0.744 to 0.915 which reflected a good degree of consistency among the respondents' answers.

3.2. Validity test

Construct validity represents the degree to which a test measures what it claims, or purports, to be measuring (Brown, 1996). According to Brown (2000), correlation coefficients represent an appropriate technique for measuring construct validity.

Table 2. Construct validity analysis

Dimensions of the independent variables							
Int.		e-WOM		CC		e-Ads	
Q. No.	*Correlation coefficient*	*Q. No.*	*Correlation coefficient*	*Q. No.*	*Correlation coefficient*	*Q. No.*	*Correlation coefficient*
1	0.789	6	0.777	11	0.833	16	0.755
2	0.784	7	0.731	12	0.854	17	0.800
3	0.761	8	0.661	13	0.742	18	0.785
4	0.760	9	0.785	14	0.853	19	0.726
5	0.778	10	0.664	15	0.771	20	0.483
KMO	0.819	*KMO*	0.763	*KMO*	0.832	*KMO*	0.805
Bartlett's	0.00	*Bartlett's*	0.00	*Bartlett's*	0.00	*Bartlett's*	0.00
Dimensions of the dependent variable							
Q. No.		21	22	23	24	25	
Correlation coefficient		0.806	0.846	0.801	0.741	0.734	
KMO		0.846					
Barlett's		0.00					

As illustrated in Table 2, the values of the correlation coefficient for the interactive activities related items ranged between 0.483–0.854 and the values of the correlation coefficient for the items of the purchase decision ranged between 0.734–0.846, and all values are positive and more than 25%. Additionally, the values of KMO for all dimensions were greater than 0.60 and the value of (sig.) for Bartlett's test is statistically significant at the level of 0.05 which indicates significant correlation values and concludes a good construct validity for each item in each dimension.

4. RESULTS

Table 3 below illustrates the results of the statistical test of the main hypothesis, which represents a set of independent variables: Int., e-WOM, CC, and e-Ads and their effect on the dependent variable represented by the female purchase decision.

Table 3. Testing the main hypothesis

Dependent variable	Model summary		ANOVA			Coefficient					
	R	*R²*	*F*	*Sig. F*	*Df*	*Variables*	*B*	*S. D.*	*Beta*	*T*	*Sig. T*
Purchase decision	0.737	0.544	114.174	0.00*	4/383	*Int.*	0.098	0.057	0.084	1.734	0.084
						e-WOM	0.165	0.054	0.144	3.035	0.003*
						CC	0.530	0.053	0.460	9.968	0.00*
						e-Ads	0.237	0.061	0.182	3.895	0.00*

Data analysis indicates that there is a statistically significant effect of the use of interactive marketing activities on the female purchase decision. This was proven by the value of *Sig. F*, which is equal to 0.00 and less than the significance level ($\alpha = 0.05$).

Moreover, the calculated value of *F* is equal to 114.174 which is greater than 2.3, which represents the significance of the study model at the degree of freedom (*Df* = 4/383). Also, the value of *R²*, which is equal to 0.544, indicates that the use of interactive marketing activities explained 54.4% of the variance in the female purchase decision. The correlation coefficient was *R* = 73.7%, which indicates a strong relationship between the use of interactive marketing activities and the dependent variable represented by the female purchase decision.

It is worth noting that such a finding was expected as literature on e-marketing pointed out the strong association between the use of technology (e-commerce) and purchase behavior of consumers (Ranjan, Siddiqui, Thapar, & Chauhan, 2020) and attributed it to digital transformation that most business sectors are undergoing in today's digital world.

Table 4. Testing the sub-hypotheses

Dependent variable	Model summary		ANOVA			Coefficient					
	R	*R²*	*F*	*Sig. F*	*Df*	*Variables*	*B*	*Std. Err.*	*Beta*	*T*	*Sig. T*
Purchase decision	0.528	0.279	149.217	0.00*	387	*Int.*	0.617	0.050	0.528	12.215	0.00*
Purchase decision	0.557	0.310	173.405	0.00*	387	*e-WOM*	0.639	0.048	0.557	13.168	0.00*
Purchase decision	0.690	0.476	350.283	0.00*	387	*CC*	0.794	0.042	0.690	18.716	0.00*
Purchase decision	0.564	0.318	180.165	0.00*	387	*e-Ads*	0.736	0.055	0.564	13.423	0.00*

It is clear from the results of Table 4 that there is a statistically significant effect of interaction on the female purchase decision. This was supported by the value of *Sig. T* which is equal to 0.00 and less than 0.05 and by the calculated value of *T* which is equal to 12.215 and is greater than the T-tabulation 1.96. In addition, *R*-value (0.528) indicates that there is an intermediate relationship between interaction and the purchase decision.

This result is in agreement with interactive marketing advocates who argued that through social media, marketers can collaborate in two-way interactions with existing and potential customers, enable the personalized marketing approach and

pick up rich, unmet customer demands speedier than any other time before (Abrar, Arif, Sindhu, & Hussain, 2017, p. 378).

Moreover, the data analysis confirmed the influence of e-WOM on the purchase decision through the value of *Sig. T* represented by 0.00 and *R*-value (0.557) which indicates the relationship of e-WOM and the purchase decision.

The above result highlights the importance of considering e-WOM and its impact on the risk-taking attitude between genders the notion which was indicated by previous research (Sohaib, Hui, & Akram, 2018).

Also, the influence of CC on the purchase decision was proven by the value of *Sig. T* which is equal to 0.00 and *R*-value (0.690) which showed a strong relationship between CC and the female purchase decision.

Finally, the data analysis confirmed that there exists a statistically significant impact at the significance level ($\alpha \leq 0.05$) for e-Ads on the female purchase decision. This was confirmed by

the value of *Sig. T* which is equal to 0.00 and *R*-value (0.564) which indicates the existence of a relationship between e-Ads and the purchase decision.

Thus, e-Ads based on using the internet as a medium to deliver marketing messages to an intended audience plays a vital role in the female purchase decision.

The finding supports the findings of Nizam, Jaafar, and Supaat (2018) which indicated the effectiveness of interactive online advertising toward customers' purchase decisions. Similarly, Tweni and Tlapana (2021) stated that online advertising is a better platform for advertising as it enables influencing customers, educating, and reaching the target customers about a certain product for purchasing purposes.

In conclusion, the results of the data analysis showed that there is a statistically significant effect at the level ($\alpha \leq 0.05$) for interactive marketing activities on the female purchase decision, where the value of the determination coefficient ($R^2 = 0.545$) and ($R = 0.737$).

Table 5. Testing the effect of moderator variables

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
A	(Constant)	-0.614	0.183		-3.363	0.001
	Int.	0.098	0.057	0.084	1.734	0.084
	e-WOM	0.165	0.054	0.144	3.035	0.003
	CC	0.530	0.053	0.460	9.968	0.000
	e-Ads	0.237	0.061	0.182	3.895	0.000
	The influence of income					
B	(Constant)	-1.010	0.410		-2.466	0.014
	Int.	0.250	0.147	0.214	1.696	0.091
	e-WOM	0.288	0.127	0.251	2.261	0.024
	CC	0.626	0.126	0.544	4.978	0.000
	e-Ads	-0.064	0.143	-0.049	-0.450	0.653
	Income	0.281	0.260	0.230	1.082	0.280
	Income → Int.	-0.120	0.107	-0.397	-1.119	0.264
	Income → e-WOM	-0.076	0.086	-0.247	-0.878	0.381
	Income → CC	-0.075	0.089	-0.236	-0.845	0.398
	Income → e-Ads	0.220	0.095	0.715	2.326	0.021
	The influence of material status					
C	(Constant)	-0.975	0.640		-1.522	0.129
	Int.	0.016	0.229	0.014	0.069	0.945
	e-WOM	0.082	0.210	0.071	0.389	0.698
	CC	0.560	0.182	0.486	3.077	0.002
	e-Ads	0.545	0.244	0.418	2.237	0.026
	Material status	0.238	0.379	0.130	0.628	0.530
	Material status → Int.	0.044	0.128	0.107	0.344	0.731
	Material status → e-WOM	0.041	0.120	0.101	0.347	0.729
	Material status → CC	-0.013	0.110	-0.031	-0.123	0.902
	Material status → e-Ads	-0.181	0.137	-0.420	-1.327	0.185

Notes: A. Predictors: (Constant), Int., e-WOM, CC, e-Ads. B. Predictors: (Constant), Int., e-WOM, e-CC, e-Ads, Income, Int. x Income, e-WOM x Income, CC x Income, e-Ads x Income. C. Predictors: (Constant), Int., e-WOM, CC, e-Ads, Material status, Int. x Material status, e-WOM x Material status, CC x Material status, e-Ads x Material status.

Table 5 illustrates the results of testing the effect of the moderating variables: income and material status on the relationship between interactive marketing activities and the female purchase decision. It is worth noting that while the constancy or change of *Sig.* values indicates the presence or absence of the effect of the moderating factor on the relationship of the independent and dependent variables, β values indicate the direction of this change.

The values of *Sig.* or *p*-value and coefficients (β) indicate the existence of a significant impact of the moderating variables on the above relationship. This effect was confirmed by the changes of values

of *Sig.* and β occurred because of the influence of the moderator variables.

As shown in section A in Table 5 which represents the direct relationship between the independent and dependent variables, the values of *Sig.* for each of interaction, e-WOM, CC, e-Ads were 0.084, 0.003, 0.000, 0.000, respectively. In section B, and because of the influence of moderator variable (income) the *Sig.* values for the four interactive marketing activities changed to be 0.264, 0.381, 0.398, 0.021, respectively. Also, in section C, the values of *Sig.* changed to 0.731, 0.729, 0.902, 0.185 as a result of the effect of the of moderator variable (material status) on

the relationship of interactive marketing activities and the female purchase decision.

The results confirmed the importance of considering the role of mediating variables in the association of interactive marketing activities and purchase decisions. The above results corroborate the ideas of Rahman, Moghavvemmi, Suberamanaian, Zanuddin, and Bin Md Nasir (2018) who argued that the influence of social media marketing activities on purchase intention differs between genders, ages, level of trust and income. Similarly, the study conducted by Abrar et al. (2017) aimed at evaluating the impact of social media interaction on brand attachment and examined the role of gender as a moderator.

5. CONCLUSION

The study confirmed the existence of strong association between the use of interactive marketing activities and female purchase behavior. The finding supports findings of Lee et al. (2020), who concluded that positive Facebook reaction icons significantly influenced brand attitude, trust, and purchase intention. In addition, the finding agrees with Tran (2017), who emphasizes the effect of online advertisements on the purchase decision.

The findings of the study pointed out the important impact of e-WOM on the purchase decision, the result which is expected and consistent with previous research (Park et al., 2021; Al-Samydai, Al-Dajani, & Al-ataywi, 2020; Alalwan, 2018).

The researchers attribute this effect to consumers' reassurance of products when they hear others speak positively about the products and the brand. In addition, the results emphasized the critical role of content credibility for companies who deal in electronic marketing through minimizing customers' perceived risk. This finding corroborates the ideas of Allan and Ali (2017) who argued that trust and content came up to be the most influential factors that play a huge role in reaching the target audience.

This study represents an important contribution to e-marketing research as it aims to gain further insight into the relationship between interactive applications and activities and female purchase decisions so that it could be a reference for future research and studies. The study also focuses on the women's sector, which is considered one of the important sectors in the online market in recent times.

In addition, this study is beneficial for marketers in the women's markets to understand the factors that are affecting consumers' purchase behavior in today's digital world where virtual communities have become a major trend in consumers' online behavior. The importance of this study stems from its purpose which is related to support marketers and decision-makers to benefit from the waves of digital transformation and the high penetration rate of social media platforms to identify the most influential variables that affect female purchase behavior.

Even when the maximum effort is made, research limitations may arise as a consequence of unexpected, human or circumstantial factors. One of the limitations of this research is the generalizability of results which is attributed to the convenience sampling technique adopted by the researchers. Hence, a potential criticism of this study is that results cannot be generalized to other sectors, contexts, or services.

Another potential limitation of research is related to research study field which was conducted exclusively on the Jordanian clothing market, focusing on one selected segment namely women. Thus, it is recommended to extend this evaluation to be conducted in other contexts and to consider other demographical and economic variables.

One further suggestion for future research is to conduct a probability sampling technique aiming at improving the validity of the research findings.

REFERENCES

1. Abend, G. (2008). The meaning of 'theory'. *Sociological Theory, 26*(2), 173–199. https://doi.org/10.1111/j.1467-9558.2008.00324.x
2. Abrar, K., Arif, M., Sindhu, M. I., & Hussain, A. (2017). Impact of social media interaction and social media usability on brand love and brand attachment with the moderating role of gender. *Journal of Business and Tourist, special issue*, 377–393. Retrieved from https://cutt.ly/jOemV3J
3. Ahmed, T., & Saeed, A. (2021). The impact of social media marketing on urban youth's brand loyalty: Through Facebook marketing. *International Journal of Entrepreneurial Research, 4*(1), 10–19. https://doi.org/10.31580/ijer.v4i1.1697
4. Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management, 42*, 65–77. https://doi.org/10.1016/j.ijinfomgt.2018.06.001
5. Ali, Y. S., Hussin, A. R. C., & Dahlan, H. M. (2019). Electronic word of mouth engagement in social commerce platforms: An empirical study. *Information Development, 36*(3), 438–456. https://doi.org/10.1177/0266666919867488
6. Allan, M., & Ali, N. N. (2017). Employing social media websites and its role in determining the targeted audience for marketing within cloth manufacturing sector in Jordan. *Innovative Marketing, 13*(2), 47–55. https://doi.org/10.21511/im.13(2).2017.05
7. Allen, M. (2017). *The SAGE encyclopedia of communication research methods.* Sage Publications. https://doi.org/10.4135/9781483381411.n666
8. Al-Samydai, M. J., Al-Dajani, D. M., & Al-ataywi, L. A. (2020). The impact of the word of mouth on buying behavior of shares; applied study in Amman's stock exchanges markets. *International Journal of Scientific & Technology Research, 9*(2), 5326–5330. Retrieved from https://www.researchgate.net/publication/339378962_The_Impact_of_The_Word_of_Mouth_on_Buying_Behavior_of_Shares_Applied_Study_in_Amman's_Stock_Exchanges_Markets

9. Arora, T., & Agarwal, B. (2019). Empirical study on perceived value and attitude of millennials towards social media advertising: A structural equation modelling approach. *Vision: The Journal of Business Perspective, 23*(1), 56–69. https://doi.org/10.1177/0972262918821248

10. Astatke, M., Weng, C., & Chen, S. (2021). A literature review of the effects of social networking sites on secondary school students' academic achievement. *Interactive Learning Environments, 29*(1), 1–17. https://doi.org/10.1080/10494820.2021.1875002

11. Brown, J. D. (1996). *Testing in language programs: A comprehensive guide to English language assessment.* Upper Saddle River, NJ: Prentice Hall Regents.

12. Brown, J. D. (2000). What is construct validity? *Shiken: JALT Testing & Evaluation SIG Newsletter, 4*(2), 8–12. Retrieved from http://jalt.org/test/PDF/Brown8

13. Cheung, M. L., Pires, G. D., Rosenberger, P. J., III, Leung, W. K. S., & Ting, H. (2020). Investigating the role of social media marketing on value co-creation and engagement: An empirical study in China and Hong Kong, *Australasian Marketing Journal, 29*(2), 118–131. https://doi.org/10.1016/j.ausmj.2020.03.006

14. Crimp, M., & Wright, L. T. (1995). *The marketing research process.* Harlow, the UK: Prentice Hall

15. Davis, L. L. (1992). Instrument review: Getting the most from a panel of experts. *Applied Nursing Research, 5*(4), 194–197. https://doi.org/10.1016/S0897-1897(05)80008-4

16. Dewey, J. (1910). *How we think.* D. C. Heath. https://doi.org/10.1037/10903-000

17. Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods, 12*(1), 1–22. https://doi.org/10.1037/1082-989X.12.1.1

18. Gordon, B. R., Jerath, K., Katona, Z., Narayanan, S., Shin, J., & Wilbur, K. C. (2020). Inefficiencies in digital advertising markets. *Journal of Marketing, 85*(1), 7–25. https://doi.org/10.1177/0022242920913236

19. Islam, M. A., Anjum, N., & Ahmed, M. I. (2021). Predicting consumers' intention to shop online in an emerging market: A COVID-19 perspective. *Journal of Marketing and Consumer Behaviour in Emerging Markets, 12*(1), 4–18. Retrieved from http://www.wz.uw.edu.pl/portaleFiles/5708-journal-of-m/no_12/JMCBEM_1(12)-2021_art.1_ost2.pdf

20. Karimi, S., Papamichail, K. N., & Holland, C. P. (2015). The effect of prior knowledge and decision-making style on the online purchase decision-making process: A typology of consumer shopping behaviour. *Decision Support Systems, 77*, 137–147. https://doi.org/10.1016/j.dss.2015.06.004

21. Kemp, S. (2021, February 11). Digital 2021: Jordan. *Datareportal.* Retrieved from https://datareportal.com/reports/digital-2021-jordan

22. Kerr, G., & Richards, J. (2020). Redefining advertising in research and practice. *International Journal of Advertising, 40*(2), 1–24. https://doi.org/10.1080/02650487.2020.1769407

23. Kose, T., & Arslan, S. (2020). Turkish consumer participation in e-commerce. *Journal of Electronic Commerce in Organizations (JECO), 18*(4), 30–50. https://doi.org/10.4018/JECO.2020100102

24. Kwok, L., Mao, Z., & Huang, Y.-K. (2019). Consumers' electronic word-of-mouth behavioral intentions on Facebook: Does message type have an effect? *Tourism and Hospitality Research, 19*(3), 296–307. https://doi.org/10.1177/1467358417742684

25. Lai, Y.-H. (2013). The moderating effect of organizational structure in knowledge management for international ports in Taiwan. *International Journal of Computer and Information Technology, 2*(2), 240–246. Retrieved from https://docplayer.net/3346132-The-moderating-effect-of-organizational-structure-in-knowledge-management-for-international-ports-in-taiwan.html

26. Lee, Y.-I., Phua, J., & Wu, T.-Y. (2020). Marketing a health brand on Facebook: Effects of reaction icons and user comments on brand attitude, trust, purchase intention, and eWOM intention. *Health Marketing Quarterly, 37*(2), 138–154. https://doi.org/10.1080/07359683.2020.1754049

27. Mahmud, M. S., Islam, M. N., Ali, M. R., & Mehjabin, N. (2020). Impact of electronic word of mouth on customers' buying intention considering trust as a mediator: A SEM approach. *Global Business Review.* https://doi.org/10.1177/0972150920976345

28. Most popular social networks worldwide as of October 2021, ranked by number of active users. (2021). *Statista.* Retrieved from https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

29. Nguyen, T. T. H., Nguyen, N., Nguyen, T. B. L., Phan, T. T. H., Bui, L. P., & Moon, H. C. (2019). Investigating consumer attitude and intention towards online food purchasing in an emerging economy: An extended TAM approach. *Foods, 8*(11), 576. https://doi.org/10.3390/foods8110576

30. Nizam, N. Z., Jaafar, J. A., & Supaat, S. H. (2018). Interactive online advertising: The effectiveness of marketing strategy towards customers purchase decision. *MATEC Web of Conferences, 150*(1), 05043. https://doi.org/10.1051/matecconf/201815005043

31. Obar, J. A., & Wildman, S. (2015). Social media definition and the governance challenge: An introduction to the special issue. *Telecommunications Policy, 39*(9), 745–750. https://doi.org/10.1016/j.telpol.2015.07.014

32. Park, J., Hyun, H., & Thavisay, T. (2021). A study of antecedents and outcomes of social media WOM towards luxury brand purchase intention. *Journal of Retailing and Consumer Services, 58*, 102272. https://doi.org/10.1016/j.jretconser.2020.102272

33. Qurashi, D., & Alkalainy, Y. (2015). The effect of social network on consumer purchase decision in Amman City. *An-Najah University Journal for Research, 29*(12), 2409–2442. Retrieved from https://journals.najah.edu/article/1149/

34. Rahman, Z., Moghavvemmi, S., Suberamanaian, K., Zanuddin, H., & Bin Md Nasir, H. N. (2018). Mediating impact of fan-page engagement on social media connectedness and followers purchase intention. *Online Information Review, 42*(7), 1082–1105. https://doi.org/10.1108/OIR-05-2017-0150

35. Ramprabha, K. (2017). Consumer shopping behaviour and the role of women in shopping — A literature review. *Research Journal of Social Sciences & Management, 7*(8), 50–63. Retrieved from https://www.researchgate.net/publication/321862434_Consumer_Shopping_Behaviour_And_The_Role_Of_Women_In_Shopping-A_Literature_Review

36. Ranjan, R. K., Siddiqui, S. A., Thapar, N., & Chauhan, S. S. (2020). E-commerce and portfolio allocations: A study on the Indian life insurance customers. *Corporate & Business Strategy Review, 1*(1), 36–46. https://doi.org/10.22495/cbsrv1i1art4

37. Richard, B., Cleavenger, D., & Storey, V. A. (2014). The buy-in: A qualitative investigation of the textbook purchase decision. *Journal of Higher Education Theory & Practice, 14*(3), 20–31. Retrieved from http://m.www.na-businesspress.com/JHETP/RichardB_Web14_3_.pdf
38. Sekaran, U., & Bougie, R. J. (2016). *Research methods for business: A skill building approach* (7th ed.). New York, NY: John Wiley & Sons, Inc.
39. Shareef, M. A., Mukerji, B., Dwivedi, Y. K., Rana, N. P., & Islam, R. (2019). Social media marketing: Comparative effect of advertisement sources. *Journal of Retailing and Consumer Services, 46*, 58–69. https://doi.org/10.1016/j.jretconser.2017.11.001
40. Sohaib, M., Hui, P., & Akram, U. (2018). Impact of eWOM and risk-taking in gender on purchase intentions: Evidence from Chinese social media. *International Journal of Information Systems and Change Management, 10*(2), 101–122. https://doi.org/10.1504/IJISCM.2018.10015819
41. Tran, T. P. (2017). Personalized ads on Facebook: An effective marketing tool for online marketers. *Journal of Retailing and Consumer Services, 39*, 230–242. https://doi.org/10.1016/j.jretconser.2017.06.010
42. Tweni, A., & Tlapana, T. (2021). The influence of online advertising on purchasing patterns of customers in the Eastern Cape. *Global Media Journal.* Retrieved from https://www.globalmediajournal.com/open-access/the-influence-of-online-advertising-on-purchasing-patterns-of-customers-in-the-eastern-cape.php?aid=89485
43. Umamaheswari, K., & Kumar, B. (2018). A study of internet marketing In India: Challenges and opportunities. *Journal of Marketing and Sales Management.* https://doi.org/10.2139/ssrn.3939584
44. Weismueller, J., Harrigan, P., Wang, S., & Soutar, G. N. (2020). Influencer endorsements: How advertising disclosure and source credibility affect consumer purchase intention on social media. *Australasian Marketing Journal, 28*(4), 160–170. https://doi.org/10.1016/j.ausmj.2020.03.002
45. Wibowo, A., Chen, S.-C., Wiangin, U., Ma, Y., & Ruangkanjanases, A. (2021). Customer behavior as an outcome of social media marketing: The role of social media marketing activity and customer experience. *Sustainability, 13*(1), 1–18. https://doi.org/10.3390/su13010189
46. Widyastuti, S., & Said, M. (2017). Consumer consideration in purchase decision of SPECS sports shoes product through brand image, product design and price perception. *Journal of Supply Chain Management, 6*(4), 199–207. Retrieved from http://perpus.univpancasila.ac.id/repository/EKIDUPT180019.pdf
47. Yadav, M., & Rahman, Z. (2017). Measuring consumer perception of social media marketing activities in e-commerce industry: Scale development & validation. *Telematics and Informatics, 34*(7), 1294–1307. https://doi.org/10.1016/j.tele.2017.06.001
48. Yu, X., & Natori, T. (2020). A qualitative investigation into definitions of advertising in China: The short video perspective. *International Journal of Japan Association for Management Systems, 12*(1), 93–102. https://doi.org/10.14790/ijams.12.93
49. Zhang, C., Phang, C. W., Wu, Q., & Luo, X. (2017). Nonlinear effects of social connections and interactions on individual goal attainment and spending: Evidences from online gaming markets. *Journal of Marketing, 81*(6), 132–155. https://doi.org/10.1509/jm.16.0038
50. Ziyadin, S., Doszhan, R., Borodin, A., Omarova, A., & Ilyas, A. (2019). The role of social media marketing in consumer behaviour. *E3S Web of Conferences, 135*, 04022. https://doi.org/10.1051/e3sconf/201913504022