

## The effect of online consumer reviews on purchasing intention through product mental image

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### CHRONICLE

### ABSTRACT

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The aim of the study is to examine the impact of online consumer reviews on purchasing intention through product mental image. The primary sources represented by the instrument were distributed to the study population consisting of consumers of cosmetics in Jordan. Recently, the phenomenon of selling cosmetics through Internet websites and social media platforms has spread widely in Jordan. Therefore, Google Forms was used to design the research instrument and ask consumers of these products to respond to it by publishing it on the official websites of the sellers and with their approval. Structural equation modeling (CB-SEM) technique using the AMOS software was used to test the study hypotheses. The study results show that product mental image mediates the relationship between online consumer review and purchasing intention. Based on the results of the study, the researchers provided recommendations.

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## 1. Introduction

The increased usage of social networking sites on the Internet has created a possibility to produce and discover substantial effects on persons in a variety of sectors, which necessitates increased focus on investing opportunities through firms in those areas (Al-Hawary & Obiadat, 2021; Tariq et al., 2022; AlHamad et al., 2022). Because it gives businesses new ways to market their products and services, as well as easy access to targeted consumer groups and knowledge of their opinions and trends about those businesses' products and services, as well as the ability to poll their opinions and expectations about their products, prices, distribution methods, and promotion (Eldahamsheh et al., 2021; Al-Quran et al., 2020). With the increasing demand by some groups on social networks, particularly well-known sites such as Facebook, Twitter, and other platforms that are very popular among various age groups, the use of mechanisms to identify consumer online reviews in general and within social networking sites in particular has spread in recent times (Collins et al., 2021; Al-Hawary & Alhajri, 2020).

E-retailers have paid more attention to concerns relating to website quality, such as brands that have been recognized for their relevance in attracting customers, earning their trust, and ensuring purchase intent (Kalia & Paul, 2021; Alolayyan et al.,

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2018; Ait Yassine, 2017). Because it contributes to the growth of consumer perception, the brand becomes more firmly established within his mind with the passage of time, and because its importance contributes to the growth of consumer perception, the label becomes more firmly established within his mind with the passage of time, the more I perceive it preferably, the likelihood of developing a relationship and trust in her h (Cortez & Dastidar, 2022; Ait-Yassine, 2012; Al-Nady et al., 2016).

Because of the numerous challenges they encounter, as well as the high prices carried by the customers, consumers have gotten accustomed to viewing traditional ways of purchasing as a waste of time (Van Boerdonk et al., 2021; Zhang & Dong, 2021; Al-Hawary & Harahsheh, 2014). Reaching stores to find the required goods takes more time and effort, and online shopping has provided a solution to these problems, with an increase in purchases through the network, where it has become very easy to reach any store or any global or local market, which has effectively contributed to the rapid spread of providing services and distributing products to organizations in general at competitive prices to some extent, as well as contributing to attracting and retaining consumers, complying with their requirements individually, and thus achieving the growth of their requirements and purchasing needs (Maqableh & Alia, 2021; Altarifi et al., 2015; Al-Qudah et al., 2012). Because of their impact on the market value of the company's shares in the financial markets, e-marketing and consumer online reviews are among the most critical concerns that directly affect the purchasing and selling policies within any organization. To represent it in the most critical major decisions facing senior management, as well as the role it might play in enhancing and expanding buying and selling activities, which helps the economy flourish. This research aims to produce findings and recommendations that will aid in the development of the brand's mental image and, as a result, enhance purchase intent.

## **2. Theoretical framework and hypotheses development**

### *2.1 Consumer online reviews*

The traditional style of buying has become, for most individuals, inappropriate. The consumer prefers simpler methods to obtain brands and access stores. The Internet has contributed to changing the ideas of consumers, especially with regard to customer convenience and speed of obtaining the product, as well as prices, information, and services related to that product, as the network has contributed to finding new ways to create value for customers and build commercial relations with them, providing security, information, shipping, quality, pricing, and time, because it has a positive impact on customer satisfaction and their appetite for online shopping (Aw et al., 2021; Al-Hawary & Al-Syasneh, 2020; Allahow et al., 2018). The researchers dealt with the concept of consumer online reviews in a way that includes many points of view according to different cultures, but there is a consensus in the general orientation of the concept with what goes on between them (Jain et al., 2021; Dash et al., 2021; AlTaweel & Al-Hawary, 2021; Mitra & Jenamani, 2021). Defined by Mudambi & Schuff (2010) as product evaluations by consumers that are documented within companies' websites or within websites dedicated to posting opinions and reviews, online consumer reviews provide access to the experiences, ratings, and opinions of other consumers who have purchased or used a particular product. While (Erkan et al., 2019) describes it as the online interchange of ideas and thoughts regarding brands, products, and services. According to Filieri (2016), any positive, negative, or neutral feedback about a rating, product, service, or brand that is shared with other customers in an unstructured format, such as a blog post, or in a more structured format, such as consumer reviews posted on an independent review site, a third-party e-commerce site, or a corporate website, is considered positive, negative, or neutral feedback. It is defined as any good, neutral, or negative appraisal of a product, service, person, or brand that is made by former consumers on websites that contain consumer reviews (Filieri, Hofacker, & Alguezaui, 2018).

Consumer online reviews are published and reviewed on the Internet to meet a growing need for social interaction; talking about their experiences as a basis for advising others about products and brands; a behavior that expresses the impact of numerical and text reviews on product sales performance; and shared feelings for extracting related themes and feelings. Review opinions have a significant function as a beneficial source of information in review texts, a common type of online behaviour (Li, Wu & Mai, 2019). Publishing consumer opinions, comments, and reviews on the Internet is a way to enhance communication and social interaction, which contributes to motivating others to search for the activities they prefer through the interconnection between friends, neighbors, or different generations on the Internet, and thus the dissemination of content on the network more widely (Kilicer et al., 2018). One of the motives that a consumer may have for publishing reviews and opinions on the Internet is an attempt to help fellow consumers make purchasing decisions, whether positive reviews aimed at helping others share the same positive experience or negative customer reviews aimed at helping others avoid exposure to problems, thus helping other consumers reduce the risks related to their purchasing decision making (Fu et al., 2018).

The multiplicity of scales addressed by the researchers became clear to them after reviewing the studies that dealt with consumer opinions on the Internet. There are many destinations for some researchers to measure the concept of consumer online reviews in order to get to know the product through the communication sites available on the Internet, which have an impact on the brand and, consequently, the purchasing intent of the user; As a result, it recommends encouraging customers and former customers to participate in the exhibition and diffusion of ideas and comments via the Internet, particularly when it comes to positive messages about the quality of services given. This contributes to lowering the risks associated with

consumers who do not intend to purchase owing to a lack of transparency in the service. The dimensions of consumer online review as follow:

**Social Impact:** Cultural and social influences have a clear impact on consumer purchasing behaviors. Whether from consumer online reviews, through friends or family, or in the event that they rely on purchases through the Internet. **Source credibility:** the credibility of the source is defined as the message's ability to provide accuracy and truthfulness in information, information consistency, and standard cues as indicators of product use, attractiveness, virtuality, and amplification of comments in terms of language and wording (Dwivedi et al., 2021). **Review timing** is an important feature in evaluating those reviews, and that timing is among the characteristics that characterize the spoken word in publishing consumer opinions and comments; Consumers' opinions can be divided in terms of timing into two parts: the first relates to opinions entered before the purchase decision; they are an important source of information before the purchase decision, and the second is after the purchase or consumption experience, and both sections have a direct impact on the purchase decision by consumers (El-Said, 2020). **Review size:** The volume of cumulative comments and reviews has a clear impact on consumer buying behavior, the volume of those reviews and comments - when consumers - have a clear impact on the intention through the Internet. A product or service that has received a large number of reviews is considered popular; thus, consumers' purchase intention increases (Ho & Wang, 2015). **Benefit gaining:** The benefit is defined as the amount of benefit obtained as a result of a customer's consumption of a specific good or service and its ability to satisfy the consumer's requirements and desires when a given amount of that good is consumed (Mundel et al., 2017).

## 2.2 Purchase Intent

Customers' desire to buy on the internet is shown in the purpose of electronic purchase, where e-commerce sites give consumers with sufficient tools and methods to encourage them to buy from virtual retailers (Kumar & Ayodeji, 2021). Because each of these elements plays a significant role for Internet sellers, e-commerce sites may try to devise a system to preserve the consumer's behaviour through it, with the direct behaviour factor referring to the consumer's intention to make a decision based on the determinants of behaviour (Molehpour, Thanh & Van Kien, 2018). The researchers addressed the concept of purchase intent from a variety of perspectives based on their cultural backgrounds, but they all agree on the overall orientation of the concept of purchase intent. Purchasing intent, according to Chhetri et al. (2021), is defined as intentionally and decisively planning and making attempts to purchase a specific product or service. And, according to Moriuchi (2021), it is the planning and conduct that individuals engage in when making future purchases of products or services, the implementation of which is contingent on the individual's ability to execute. While Nagar (2020) stated that it is the pattern that the consumer follows in advance planning in his behaviour to search, purchase, use, or evaluate goods, services, and ideas for the appropriate product that meets his needs and desires (Majeed et al., 2021). Purchasing intent refers to a consumer's decision-making process that influences his actual behaviour while purchasing a service or product over the Internet and is influenced by the consumer's level of trust and experience. Purchase intent is defined by Tullani, Saha, and Dahiya (2019) as consumer strategies that influence purchasing behavior and the likelihood of purchasing a specific commodity or service.

The perceptual processes to which the consumer is exposed form different perceptions of the same stimulus, such as voluntary exposure. Where the consumer drops most of the stimuli and signals that are not related to his needs, he tends to notice stimuli that are related to his current needs, in addition to being subjected to voluntary distortion. It is one of the important processes that reveal the consumer's tendency to adapt or adapt information in line with the personal meanings that he aspires to, such as beliefs and positive attitudes that he may have towards a brand through the information collected (Otterbring et al., 2022). The consumer may also be exposed to voluntary remembering, where he tends to remember information that supports his attitudes and beliefs. Because of voluntary recollection, the individual who seeks to buy a brand is likely to remember the strengths he taught and forget the strengths he taught about another competitive brand (Yen & Tang, 2019), and if the actual purchase is made through the Internet, Institutions that use technology should seek to influence the voluntary element that expresses preference, or the consumer's intention to act on a subject. This is the outcome of behaviour. Therefore, behaviour comes as a result of the two dimensions (perceptual and influence) by facilitating purchases; by intensifying the promotion of the product through the advertisements available on the institution's website, as well as providing the possibility of purchasing through it, or ensuring that the product is delivered to places close to consumers (Bae & Chang, 2021). Moreover, focus on the various means of stimulating electronic sales; In order to embody the purchase process or form a positive impression about the purchase of the product, and publish reviews and opinions of consumers and customers through the Internet in an attempt to assist consumers in making purchase decisions by influencing their purchasing intent (Rahim et al., 2016).

## 2.3 Mental image of the product

The majority of brand-related strategies rely on cultivating mental associations with the brand, which are associations with areas of differentiation, in order to give the consumer a compelling reason to choose the brand over others (Rego et al., 2021; Al-Hawary & Al-Khazaleh, 2020). Where the brand's mental connections are aimed toward the brand's traits and benefits that are directly and strongly linked in the consumer's mind, it works to establish a positive image where the consumer relies on these connections in his brand evaluation, especially when he believes he won't find these similar characteristics and

benefits in competing companies. The links to the break-even points, on the other hand, play a significant part in the competition process because they are a set of links that do not need to be shared with other brands (Shajrawi, 2020).

Building a successful brand through the Internet is a precondition for success, and the ability to generate trust and commitment with consumers is based on brand principles. Although the site's aesthetics and functioning ensure the consumer's privacy and security, these factors alone do not guarantee a good Internet experience. Companies that use the Internet, on the other hand, require social networks to establish social interaction on their communication websites, resulting in positive behavioural intent and recurring use through the construction of attitudes (Bowen, 2019). A trademark is a name, sign, or image that identifies a product's competitive edge over other items. The latter serves as an identification card for the product's owner and is a vital tool for consumers to identify items and services and differentiate them from others on the market (Iswara, & Tantimin, 2022). It's also a distinguishing symbol or indicator used by an individual, company, or business organization to show that the items or services offered to the consumer (on which the trademark appears) come from a single source, in order to distinguish them from those of other companies (Sundararaj & Rejeesh, 2021). A mental image is an actual image of a facility or institution established in people's brains. Irrational, it may rely on evidence, documents, rumours, and unreliable sayings, but in the end, it represents a value for those who carry it, and it is also the impression formed by the consumer about the product as a result of the image formed or made by the product's manufacturer (Hoppe et al., 2021). Others see the image as one of the strategic assets that lead to the formation of a competitive advantage and favourable conditions for the organization's survival and growth.

#### *2.4 Consumers' online review, purchase intent and product mental image*

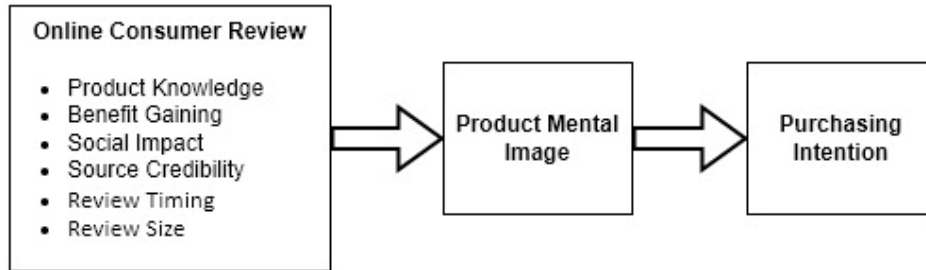
The difference between the electronic consumer and the ordinary consumer is the method of transactions in the buying and selling process that take place through electronic means provided by information and communication technology; however, this does not prevent the ordinary consumer from describing the electronic consumer by searching for the characteristics of the product he wants through the Internet and the wealth of information it provides, which makes the consumer resort to it. The electronic consumer differs from others in that he may gather knowledge about the things he wants to buy without feeling rushed, and he can provide quick feedback to the institutions with which he engages with on what has been presented or supplied via the Internet. Talking about services or products with the spoken word is what traditional marketing procedures are known for. The utterance, like electronic opinions, communicates about products and services via the eyes of some people. There are chats where people share their thoughts and suggestions without any commercial objectives to urge others to purchase these things. These comments go beyond simply discussing things and are one of the many methods that have a direct impact on people and help persuade them to purchase a product or service. Most people believe what they hear from others who are similar to them, and we require information in our interactions in general, since we are more likely to hear and believe friends, family, and co-workers than advertising or sellers. The stronger the fit between the consumer's mental image and his self-image, the higher the consumer's opinion of the brand and, eventually, his desire to purchase it (Mansoor & Paul, 2022). One of the motives that a consumer may have for publishing reviews and opinions on the Internet is an attempt to help fellow consumers make purchasing decisions, whether positive reviews aim to help others share the same positive experience, or negative customer reviews aim to help others by avoiding problems they may have encountered, thus helping other consumers reduce the risks associated with their purchasing decision making (Fong et al., 2021). Fong et al. (2021) pointed out the need to work on filtering messages by allowing only content related to the products and services they provide and deleting irrelevant messages. It is also advised to encourage the participation of customers and former consumers in the dissemination of comments, opinions, and reviews through the Internet, especially positive messages related to the quality of intangible services, which is provided to reduce perceived risk by consumers who intend to purchase due to their lack of service clarity.

The emergence of online reviews and comments as a means of exchanging opinions between consumers through the Internet has helped to increase the credibility and improve the mental image of the product due to the nature of the existing relationships between its parties through the Internet, and its effectiveness is determined by the nature of the questions asked, the quality of the information provided, and the persuasive method used (Visentin, Pizzi & Pichierri, 2019). According to Chen & Chang (2018), the volume of cumulative comments and reviews has an impact on customer buying behaviour, and the number of reviews and comments affect consumers' buying intentions on the Internet while looking at the product or service they receive. According to a significant number of reviews, popular products or services are popular, which increases buyers' purchasing intent. The intent to buy from consumers through the Internet is affected by the number of reviews and the volume of comments; A popular product or service is one that receives a large number of reviews. Consequently, consumers' buying intentions increase (Filiari, Hofacker, & Alguezaui, 2018). Any enhancement in the ability to express opinions and reviews on the Internet will have a favorable impact on consumers' willingness to buy items or services from them through the Internet. The interchange of ideas, the search for knowledge, and the review of previous experiences all have intrinsic worth to potential customers on the Internet. It helps consumers feel at ease, which necessitates that the providers of these services regulate the review of communications via the Internet because it has an impact on the consumer's desire to buy via the Internet by establishing a transitory attitude toward a particular service or commodity (Fong et al., 2021). As a result, the majority of brand-related strategies work and focus on creating the brand's mental associations, which are associated with points of differentiation, in order to provide the consumer with a good and convincing reason to prefer the brand over others. Building a successful brand over the Internet is a precondition for success, and the capacity to develop a positive mental image and commitment with the consumer is crucial to building the brand and influencing the user's ultimate purposeful action. Physical means help

to deepen this bond. Although the site's aesthetics and functioning, as well as the consumer's privacy and security, are crucial, they do not ensure a good Internet experience. Rather, organizations need social networks to establish social interaction on their communication websites via the Internet, which leads to good behavioral intent and recurring use through the construction of attitudes (Bowen, 2019). Building trust between the consumer and the brand leads to the possibility of developing the commitment among the consumer towards the brand, maintaining loyalty to that brand, paying a price premium to the brand, as well as increasing the desire to buy the brands resulting from the expansion of the brand. Accordingly; the study hypothesis can be formulated as follows:

**H:** *There is an impact of consumers' online reviews on the intent to purchase through the mental image of the product.*

### 3. Study model



**Fig. 1.** Research Conceptual Model

### 4. Research methodology

#### 4.1 Data Collection

The data relating to the impact of online consumer review on purchasing intention through product mental image were qualitative data that relied on two main sources. The secondary source is based on a review of literature related to research variables through books and journals published online. The primary sources represented by the instrument were distributed to the study population consisting of consumers of cosmetics in Jordan. Recently, the phenomenon of selling cosmetics through Internet websites and social media platforms has spread widely in Jordan. Therefore, Google Forms was used to design the research instrument and ask consumers of these products to respond to it by publishing it on the official websites of the sellers and with their approval. 1241 respondents completed the questions of the research instrument. However, They Included 139 responses whose answers take a repeating pattern and are not suitable for the requirements of statistical analysis. Accordingly, 1102 responses were analyzed which constituted 88.79% of the total responses.

It demonstrated through the analysis of the demographic characteristics of the sample that it included 21.2% of males and 78.8% of females. Most of the respondents were from young age groups, where category "from 30 to less than 40" ranked first of 40.6%, followed by category "less than 30" ranked second of 34.1%, then category "from 40 to less than 50" ranked third of 14.8%, and finally "50 and older" ranked fourth of 10.5%. In terms of qualifications, most respondents hold a bachelor's degree 38.4%, followed by those with a diploma or less 27.7%, then a PhD 22.9%, and a master's degree 11.0% was ranked the last.

#### 4.2 Research Instrument

An online questionnaire was used to collect data related to the effect of online consumer review on purchasing intention through product mental image. This questionnaire consisted of three parts: an introduction that explains the objective of the study, the respondents' demographic data, and a section devoted to the main research variables. The demographic data part included three categorical variables (gender, age, and qualification). As for the main variables, they were ordinal variables measured using the five-point Likert scale. All study paragraphs have been translated into Arabic and back into English so that the respondents can understand and answer them accurately.

Online consumer review: it was the independent variable measured by 24 items extracted from (Kim et al., 2018). This variable was a second-order construct that was subdivided into six first-order constructs. Product knowledge was measured through four items (PK1-PK4). Benefit gaining was measured using four items (BG1-BG4). Social impact was measured through four items (SI1-SI4). Source credibility was measured using four items (SC1-SC4). Review timing was measured through four items (RT1-RT4). Review size was measured using four items (RS1-RS4).

Product mental image was the mediating variable in the current research that was measured using six items developed by (Ebrahimi, 2020) and was considered the first-order construct. Moreover, purchasing intention was the dependent variable in this research, as it was measured using seven items used by (Zhang et al., 2018) and was Considered the first-order construct.

## 5. Research results

### 5.1 Measurement Model Evaluation

In this study, confirming factor analysis (CFA) was applied to evaluate the measurement model. CFA is useful for determining the extent to which the observed variables belong to their latent variables. It is also used to measure validity and reliability (Brown, 2015). Factor loadings and average variance extracted (AVE) were used to identify the convergent validity. The comparison between the values of AVE and the maximum share variance (MSV), as well as the comparison between the square root of the average variance extracted ( $\sqrt{\text{AVE}}$ ) and the correlation coefficients between the variables, were used to measure the discriminant validity. For reliability, the McDonald's omega coefficient was utilized to determine the composite reliability (CR) of the measurement model. Table.1 reports the results of the measurement model evaluation.

**Table 1**  
Convergent Validity, Discriminant Validity, and Reliability

Constructs	Items	Loadings	AVE	MSV	$\sqrt{\text{AVE}}$	CR
Product Knowledge(PK)	PK1	0.714	0.547	0.421	0.740	0.828
	PK2	0.794				
	PK3	0.681				
	PK4	0.764				
Benefit Gaining (BG)	BG1	0.754	0.573	0.315	0.757	0.842
	BG2	0.634				
	BG3	0.821				
	BG4	0.805				
Social Impact (SI)	SI1	0.722	0.585	0.403	0.765	0.848
	SI2	0.791				
	SI3	0.861				
	SI4	0.672				
Source Credibility(SC)	SC1	0.758	0.570	0.395	0.755	0.841
	SC2	0.706				
	SC3	0.738				
	SC4	0.815				
Review Timing (RT)	RT1	0.692	0.558	0.416	0.747	0.834
	RT2	0.743				
	RT3	0.711				
	RT4	0.835				
Review Size (RS)	RS1	0.806	0.607	0.368	0.779	0.860
	RS2	0.788				
	RS3	0.702				
	RS4	0.815				
Product Mental Image (PMI)	PMI1	0.774	0.593	0.485	0.770	0.897
	PMI2	0.734				
	PMI3	0.685				
	PMI4	0.834				
	PMI5	0.765				
	PMI6	0.818				
Purchasing Intention (PUI)	PUI1	0.744	0.598	0.502	0.773	0.912
	PUI2	0.720				
	PUI3	0.751				
	PUI4	0.792				
	PUI5	0.828				
	PUI6	0.813				
	PUI7	0.759				

The values of the factors' loadings on their latent variables were within the range of (0.634-0.861) which is greater than the lowest value of 0.50, as well as the values of AVE that exceeded the minimum threshold of 0.50 (Marsh et al., 2020). Accordingly, the measurement model was considered to have convergent validity. The results indicated that the values of AVE exceed the values of MSV, and all values of  $\sqrt{\text{AVE}}$  were higher than the correlation coefficients reported in the table.2. Therefore, the measurement model was characterized by discriminant validity (Franke & Sarstedt, 2019). Moreover, the values of CR were within the range of (0.828-0.912), thus being greater than the minimum value of 0.70 that is used to judge the

composite reliability of the measurement model (Hayes & Coutts, 2020). Hence, the measurement model was considered valid and reliable in line with the requirements for completing the statistical analysis and generalizing the results.

### 5.2 Descriptive Analysis

Means and standard deviations were calculated as one of the descriptive analysis methods to determine the respondents' perspectives about online consumer review, purchasing intention, and product mental image. Moreover, the values of the Pearson's correlation coefficients were extracted between the dimensions of these variables to determine whether there was a multicollinearity problem between the online consumer review dimensions. Table.2 demonstrates the results of these descriptive statistics.

**Table 2**  
Descriptive statistics

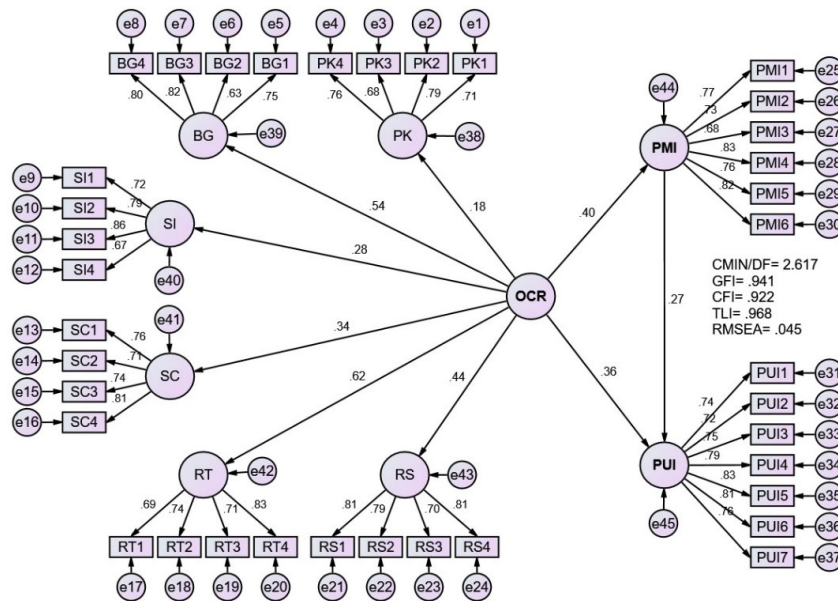
Constructs	M	SD	1	2	3	4	5	6	7	8
1. Product Knowledge	3.42	0.647	1							
2. Benefit Gaining	3.71	0.925	0.517	1						
3. Social Impact	3.63	0.775	0.497	0.443	1					
4. Source Credibility	3.66	0.739	0.552	0.428	0.594	1				
5. Review Timing	3.77	0.957	0.536	0.567	0.537	0.415	1			
6. Review Size	3.59	0.814	0.495	0.510	0.448	0.439	0.564	1		
7. Product Mental Image	3.69	0.794	0.625	0.605	0.678	0.667	0.587	0.591	1	
8. Purchasing Intention	3.54	0.858	0.587	0.661	0.615	0.625	0.648	0.617	0.633	1

Note: \* all correlation coefficients were statistically significant at  $p \leq 0.05$ .

The results listed in Table 2 show that most of the online consumer review dimensions were at a moderate level, except review timing ( $M= 3.77$ ,  $SD= 0.957$ ) which was ranked first at a high level and benefit gaining ( $M= 3.71$ ,  $SD= 0.925$ ) which was ranked second and at a high level as well. As for the rest of the dimensions, they were at a moderate level, where source credibility ( $M= 3.66$ ,  $SD= 0.739$ ) was ranked third, followed by social impact ( $M= 3.63$ ,  $SD= 0.775$ ) was ranked fourth, then review size ( $M= 3.59$ ,  $SD= 0.814$ ) in the fifth rank, while product knowledge ( $M= 3.42$ ,  $SD= 0.647$ ) was in the sixth and last rank. The purchasing intention ( $M= 3.54$ ,  $SD= 0.858$ ) was at a moderate level, while the product mental image ( $M= 3.69$ ,  $SD= 0.794$ ) was at a high level. Besides, Hair et al., (2019) argued that the values of the correlation coefficients between the dimensions of the independent variable should not be more than 0.80 to be free from the multicollinearity problem. It is evident from the results that the values of the correlation coefficients between the online consumer review dimensions ranged between  $R= 0.415$  and  $R= 0.567$ , which is lower than the indicated upper limit. Consequently, online consumer review dimensions were considered to have appropriate autonomy, and each is self-expressing.

### 5.3 Structural Model

The effect of online consumer review on purchasing intention through product mental image was examined through the covariance-based structural equation modeling (CB-SEM) technique using the AMOS software. Fig. 2 illustrates the achieved results related to the construction validity and values of fit index.



**Fig. 2.** Structural model for Testing OCR on PI through PMI

The results reported in Fig. 2 indicated that the chi-squared ratio (CMIN/DF) was 2.617 which is less than the upper threshold of the indicator of 3 (Villarreal & Jorgensen, 2020). The values of the goodness of fit index (GFI), the comparative fit index (CFI), and the Tucker-Lewis index (TLI) were above 0.90, which is the acceptable minimum for these indicators (Niemand & Mai, 2018). Moreover, the root mean square error of approximation was 0.045, which did not exceed the permissible limit of 0.80 (Xia & Yang, 2019). As for the effect coefficients of the online consumer review on purchasing intention through product mental image, they are disclosed in Table.3.

**Table 3**  
Structural Standardized Path Coefficients for Testing Hypotheses

Path	Direct Effect		Indirect Effect		Total Effect		
	$\beta$	p-value	$\beta$	p-value	$\beta$	C.R	p-value
OCR → PUI	0.385	0.003			0.385	13.322**	0.003
OCR → PMI	0.402	0.000			0.402	16.448***	0.000
PMI → PUI	0.268	0.02			0.268	11.423*	0.02
OCR → PMI → PUI	0.362	0.000	0.108	0.03	0.470	17.678***	0.000

Note: \*  $p \leq 0.05$ , \*\*  $p \leq 0.01$ , \*\*\*  $p \leq 0.001$ .

It is clear from Table 3 that online consumer review had a positive-direct effect on purchasing intention ( $\beta = 0.358$ , C.R= 13.322,  $p = 0.003$ ) and product mental image ( $\beta = 0.402$ , C.R= 16.448,  $p = 0.000$ ). Furthermore, product mental image had a positive-direct effect on purchasing intention ( $\beta = 0.268$ , C.R= 11.423,  $p = 0.02$ ). Thus, product mental image mediates the relationship between online consumer review and purchasing intention, where the total effect ( $\beta = 0.470$ , C.R= 17.678,  $p = 0.000$ ) was distributed over a direct effect ( $\beta = 0.362$ ,  $p = 0.000$ ) and an indirect effect ( $\beta = 0.108$ ,  $p = 0.03$ ).

## 6. Discussion

The study's findings revealed that online reviews had a substantial impact on electronic customers' intention to buy by influencing their mental image of the product. Other consumers' opinions, who have no marketing tendency or strategy to persuade, are what matters. He believes these thoughts are correct, which contributes to a real desire to buy. When a customer forms a positive impression of a product based on their initial encounter, they develop a positive mental image, which increases their desire to buy it several times whenever the need arises. This study supports Moslehpour Thanh & Van Kien (2018), who found that the consumer is exposed to a variety of elements that influence their behavior, attitudes, and behavior toward the goods and services they are supplied. Purchasing is influenced by the consumer's cultural, social, personal, psychological, and economic aspects. The customer's buy intent does not appear out of nowhere; rather, it is the result of internal and external variables and factors in the individual, as well as external variables and factors such as consumer opinions obtained over the Internet, which assist him in making a purchase decision.

According to the study, there is a clear increase in purchases made as a result of Internet marketing through the mediating role of the brand's mental image, which caused these stores to be easily accessible and thus contribute to the rapid spread of their products and services at competitive prices, which contributed to attracting consumers, retaining them, and individually matching their requirements, as well as achieving purchase growth. The mental pictures of brands are extremely important in acquiring consumer confidence, and consumer opinions boost the buyer's confidence. The more comments and opinions posted, the greater the legitimacy, and thus the customer's willingness to buy. In terms of the evaluation stage, the customer works to classify the brands before making a purchase decision, so that the consumer's purchasing decision is to buy the best brand among alternative brands.

Product knowledge relates to actual behavior that has a significant impact on product identification, and customer opinions published on the Internet reflect opinions that reflect the true quality of the good or service. These opinions, according to the researcher, are the consequence of his search for the attributes of the product he desires. The findings revealed that consumers are using consumer comments to construct a partial picture of the product or service, and that consumer assessments help buyers reduce the risks they face when making a purchase decision. Product knowledge has an impact on the brand's trust, and it is possible to know the product through the opinions of consumers, forming an image and impression that enables it to have confidence in that product associated with a particular brand. This is because the consumer is looking for a brand that makes him sure that he is getting the best product. The desire of customers to purchase through the Internet is reflected in the intention of purchase, which provides satisfactory tools and means for the consumer, so that the shopper is more likely to buy from virtual stores, as it provides the necessary information about products or services, search functions, and price comparison sheets, which generates consumer confidence in the company's goods and brand.

These findings support Somohardjo's (2017) findings, which found that when a review is objective, it has a greater impact on the consumer's purchase intention, as positive equivalence has a greater impact on the review attitude and purchase intent, and those opinions and comments did not help to increase the effects of equivalence, regency, and length as expected. According to Fong et al. (2018), the usability, timeliness, and equivalency of consumer reviews of online hotel reservations have



a substantial impact on online hotel reservation intentions in Malaysia. Furthermore, the Kilicer (2019) study, which indicates that interpersonal conversations by the Quality and Youth team have a substantial impact on brand trust among young people, shows that the outcome of the interpersonal conversation has a considerable impact on the brand's perceived trust. The quality team's devotion to the brand has a big and visible impact on how young people trust the brand as a result of intergenerational counseling.

## 7. Recommendations

According to the results of the study, managers and decision-makers should emphasize the necessity of getting to know the product, as this information aids in recognizing the product's location and the need to understand its benefits and downsides. Furthermore, electronic comments assist in learning about the product's prices, developments, and technical specifics, in addition to its attributes. Emphasizing the role of social influence through online reviews and comments helps to develop the consumer's conviction about the product and forms an impression that helps to form the consumer's impression. Furthermore, because consumers are more interested in electronic remarks about a product or service, the assurance of electronic comments is based on genuine experience, which varies between people or consumers. Although there is some exaggeration in this case, there is a widespread notion that electronic comments convey unbiased substance. It is necessary to emphasize that the Jordanian market contains two purchasing segments, and that the dominant segment pays a lot of attention to the brand that contains a greater number of electronic comments, which contributes to generating the interest of many people in the brand.

## References

- Ait Yassine, F. (2017). The Role of Management Information Systems in the Effectiveness of Managerial Decision Making in Greater Irbid Municipality. *Arabian Journal of Business Management Review*, 7(315), 2.
- Ait-Yassine, F. L. Y. (2012). Review of Business Intelligence and Portfolios Performance with Case Study. *European Journal of Business and Management*, 4(9), 66-71.
- Al-Quran, A. Z., Alhalalmeh, M. I., Eldahamshah, M. M., Mohammad, A. A., Hijjawi, G. S., Almomani, H. M., & Al-Hawary, S. I. (2020). Determinants of the Green Purchase Intention in Jordan: The Moderating Effect of Environmental Concern. *International Journal of Supply Chain Management*, 9(5), 366-371.
- AlHamad, A., Alshurideh, M., Alomari, K., Kurdi, B., Alzoubi, H., Hamouche, S., & Al-Hawary, S. (2022). The effect of electronic human resources management on organizational health of telecommunications companies in Jordan. *International Journal of Data and Network Science*, 6(2), 429-438.
- Al-Hawary, S. I., & Al-Khazaleh A, M. (2020). The Mediating Role of Corporate Image on the relationship between Corporate Social Responsibility and Customer RETENTION. *Test Engineering and Management*, 83(516), 29976-29993.
- Al-Hawary, S. I., & Harahsheh, S. . (2014). Factors Affecting Jordanian Consumer Loyalty Toward Cellular phone Brand. *International Journal of Economics and Business Research*, 7(3), 349-375. Retrieved from <https://ideas.repec.org/a/ids/ijecbr/v7y2014i3p349-375.html>
- Al-Hawary, S. I. S., & Alhajri, T. M. S. (2020). Effect of Electronic Customer Relationship Management on Customers' Electronic Satisfaction of Communication Companies in Kuwait. *Calitatea*, 21(175), 97-102.
- Al-Hawary, S. I. S., & Obiadat, A. A. (2021). Does mobile marketing affect customer loyalty in Jordan?. *International Journal of Business Excellence*, 23(2), 226-250.
- Al-Hawary, S. I., & Al-Syasneh, M. S. (2020). Impact of dynamic strategic capabilities on strategic entrepreneurship in presence of outsourcing of five stars hotels in Jordan. *Business: Theory and Practice*, 21(2), 578-587.
- Allahow, T. J. A. A., Al-Hawary, S. I. S., & Aldaihani, F. M. F. (2018). Information Technology and Administrative Innovation of the Central Agency for Information Technology in Kuwait. *Global Journal of Management and Business*, 18(11-A), 1-16. Retrieved from <https://www.journalofbusiness.org/index.php/GJMBR/article/view/2593>
- Al-Nady, B. A., Al-Hawary, S. I., & Alolayyan, M. (2016). The Role of Time, Communication, and Cost Management on Project Management Success: an Empirical Study on Sample of Construction Projects Customers in Makkah City, Kingdom of Saudi Arabia. *International Journal of Services and Operations Management*, 23(1), 76-112. <https://doi.org/10.1504/IJSOM.2016.073293>
- Alolayyan, M., Al-Hawary, S. I., Mohammad, A. A., & Al-Nady, B. A. (2018). Banking Service Quality Provided by Commercial Banks and Customer Satisfaction. A structural Equation Modelling Approaches. *International Journal of Productivity and Quality Management*, 24(4), 543-565. <https://doi.org/10.1504/IJPQM.2018.093454>
- Al-Qudah, K. A., Al-Hawary, S. I., & Al-Mehsen, M. A. (2012). Electronic Credit Cards Usage and Their Impact on Bank's Profitability: The Rate of Return on Owners Equity Model "An Empirical Study. *Interdisciplinary Journal of Contemporary Research in Business*, 4(7), 828-841. Retrieved from <https://pdfs.semanticscholar.org/3a0d/92a5a1ea64bae3f8bd42045be55a903a6631.pdf>
- Altarifi, S., Al-Hawary, S. I. S., & Al Sakkal, M. E. E. (2015). Determinants of E-Shopping and its Effect on Consumer Purchasing Decision in Jordan. *International Journal of Business and Social Science*, 6(1), 81-92.
- AlTaweel, I. R., & Al-Hawary, S. I. (2021). The Mediating Role of Innovation Capability on the Relationship between Strategic Agility and Organizational Performance. *Sustainability*, 13(14), 7564.

- Aw, E. C. X., Basha, N. K., Ng, S. I., & Ho, J. A. (2021). Searching online and buying offline: Understanding the role of channel-, consumer-, and product-related factors in determining webrooming intention. *Journal of Retailing and Consumer Services*, 58, 102328.
- Bae, S. Y., & Chang, P. J. (2021). The effect of coronavirus disease-19 (COVID-19) risk perception on behavioural intention towards 'untact' tourism in South Korea during the first wave of the pandemic (March 2020). *Current Issues in Tourism*, 24(7), 1017-1035.
- Bowen, L. (2019). Assessing the effectiveness of online cognitive behavioral therapy in adults with chronic insomnia: A systematic review and meta-analysis. *Lynchburg Journal of Medical Science*, 1(3), 6.
- Brown, T.A. (2015). *Confirmatory factor analysis for applied research* (Second edition). The Guilford Press.
- Chen, C. C., & Chang, Y. C. (2018). What drives purchase intention on Airbnb? Perspectives of consumer reviews, information quality, and media richness. *Telematics and Informatics*, 35(5), 1512-1523.
- Chhetri, S., Fernandes, S., & Baby, S. (2021). Validating Purchase Intentions for Green Cosmetic Products: Applying and Extending theory of Planned Behavior. *INFORMATION TECHNOLOGY IN INDUSTRY*, 9(1), 773-785.
- Collins, B., Hoang, D. T., Nguyen, N. T., & Hwang, D. (2021). Trends in combating fake news on social media—a survey. *Journal of Information and Telecommunication*, 5(2), 247-266.
- Cortez, R. M., & Dastidar, A. G. (2022). A longitudinal study of B2B customer engagement in LinkedIn: The role of brand personality. *Journal of Business Research*, 145, 92-105.
- Dash, A., Zhang, D., & Zhou, L. (2021). Personalized ranking of online reviews based on consumer preferences in product features. *International Journal of Electronic Commerce*, 25(1), 29-50.
- Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., ... & Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 57, 101994.
- Ebrahimi, M. (2020). Modeling the Improvement of the Brand Mental Image of the Holdings through the Development of Intellectual Capital. *Quarterly Journal of Brand Management*, 7(1), 15-45.
- Eldahamsheh, M.M., Almomani, H.M., Bani-Khaled, A.K., Al-Quran, A.Z., Al-Hawary, S.I.S& Mohammad, A.A (2021). Factors Affecting Digital Marketing Success in Jordan. *International Journal of Entrepreneurship*, 25(S5), 1-12.
- El-Said, O. A. (2020). Impact of online reviews on hotel booking intention: The moderating role of brand image, star category, and price. *Tourism Management Perspectives*, 33, 100604.
- Erkan, I., Gokerik, M., & Acikgoz, F. (2019). The impacts of facebook ads on brand image, brand awareness, and brand equity. In *Handbook of Research on Entrepreneurship and Marketing for Global Reach in the Digital Economy* (pp. 442-462). IGI Global.
- Feng, J., Xu, S. X., & Li, M. (2021). A novel multi-criteria decision-making method for selecting the site of an electric-vehicle charging station from a sustainable perspective. *Sustainable Cities and Society*, 65, 102623.
- Filieri, R. (2016). What makes an online consumer review trustworthy?. *Annals of Tourism Research*, 58, 46-64.
- Filieri, R., Hofacker, C. F., & Alguezau, S. (2018). What makes information in online consumer reviews diagnostic over time? The role of review relevancy, factuality, currency, source credibility and ranking score. *Computers in Human Behavior*, 80, 122-131.
- Frank, G., Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. *Internet Research*, 29(3), 430-447.
- Fu, S., Yan, Q., & Feng, G. C. (2018). Who will attract you? Similarity effect among users on online purchase intention of movie tickets in the social shopping context. *International Journal of Information Management*, 40, 88-102.
- Hair, J.F., Page, M., & Brunsveld, N. (2019). *The essentials of business research methods* (Fourth edition). Routledge.
- Hayes, A.F., Coutts, J.J. (2020). Use Omega Rather than Cronbach's Alpha for Estimating Reliability. But... *Communication Methods and Measures*, 14(1), 1-24.
- Ho, C. W., & Wang, Y. B. (2015). Re-purchase intentions and virtual customer relationships on social media brand community. *Human-centric computing and information sciences*, 5(1), 1-16.
- Hoppe, J. M., Holmes, E. A., & Agren, T. (2021). Exploring the neural basis of fear produced by mental imagery: imaginal exposure in individuals fearful of spiders. *Philosophical Transactions of the Royal Society B*, 376(1817), 20190690.
- Iswara, V. D., & Tantimin, T. (2022, February). Law Protection Towards Trademark of PT. Viona Duta Samudra through Trademark Registration Accompaniment. In *ConCEPt-Conference on Community Engagement Project* (Vol. 2, No. 1, pp. 254-260).
- Jain, P. K., Pamula, R., & Srivastava, G. (2021). A systematic literature review on machine learning applications for consumer sentiment analysis using online reviews. *Computer Science Review*, 41, 100413.
- Kalia, P., & Paul, J. (2021). E-service quality and e-retailers: Attribute-based multi-dimensional scaling. *Computers in Human Behavior*, 115, 106608.
- Kilicer, K., Bardakci, S., & Arpacı, I. (2018). Investigation of emerging technology usage characteristics as predictors of innovativeness. *Contemporary Educational Technology*, 9(3), 225-245.
- Kim, S., Kandampully, J., & Bilgihan, A. (2018). The influence of eWOM communications: An application of online social network framework. *Computers in Human Behavior*, 80, 243-254.
- Kumar, V., & Ayodeji, O. G. (2021). E-retail factors for customer activation and retention: An empirical study from Indian e-commerce customers. *Journal of Retailing and Consumer Services*, 59, 102399.

- Li, Y. Y., Wang, W. J., Wang, H., Lin, H., & Wu, L. M. (2019). Mixed-anion inorganic compounds: a favorable candidate for infrared nonlinear optical materials. *Crystal Growth & Design*, 19(7), 4172-4192.
- Majeed, A., Ahmed, I., & Rasheed, A. (2021). Investigating influencing factors on consumers' choice behavior and their environmental concerns while purchasing green products in Pakistan. *Journal of Environmental Planning and Management*, 1-25.
- Mansoor, M., & Paul, J. (2022). Consumers' choice behavior: An interactive effect of expected eudaimonic well-being and green altruism. *Business Strategy and the Environment*, 31(1), 94-109.
- Maqableh, M., & Alia, M. (2021). Evaluation online learning of undergraduate students under lockdown amidst COVID-19 Pandemic: The online learning experience and students' satisfaction. *Children and Youth Services Review*, 128, 106160.
- Marsh, H.W., Guo, J., Dicke, T., Parker, P.D., & Craven, R.G. (2020). Confirmatory Factor Analysis (CFA), Exploratory Structural Equation Modeling (ESEM), and Set-ESEM: Optimal Balance Between Goodness of Fit and Parsimony. *Multivariate Behavioral Research*, 55(1), 102-119.
- Mitra, S., & Jenamani, M. (2021). Helpfulness of online consumer reviews: A multi-perspective approach. *Information Processing & Management*, 58(3), 102538.
- Moriuchi, E. (2021). An empirical study on anthropomorphism and engagement with disembodied AIs and consumers' re-use behavior. *Psychology & Marketing*, 38(1), 21-42.
- Moslehpour, M., Thanh, H. L. T., & Kien, P. V. (2018, January). Technology perception, personality traits and online purchase intention of Taiwanese consumers. In *International Conference of the Thailand Econometrics Society* (pp. 392-407). Springer, Cham.
- Mudambi, S. M., & Schuff, D. (2010). Research note: What makes a helpful online review? A study of customer reviews on Amazon.com. *MIS quarterly*, 34(1), 185-200.
- Mundel, J., Huddleston, P., & Vodermeier, M. (2017). An exploratory study of consumers' perceptions: what are affordable luxuries?. *Journal of Retailing and Consumer Services*, 35, 68-75.
- Nagar, K. (2020). An Examination of Gym Supplement Choice: Using the Modified Theory of Planned Behaviour. *Journal of Food Products Marketing*, 26(7), 499-520.
- Niemand, T., & Mai, R. (2018). Flexible cutoff values for fit indices in the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 46(6), 1148-1172.
- Otterbring, T., Rolschau, K., Furrebøe, E. F., & Nyhus, E. K. (2022). Crossmodal correspondences between typefaces and food preferences drive congruent choices but not among young consumers. *Food Quality and Preference*, 96, 104376.
- Rahim, R. A., Sulaiman, Z., Chin, T. A., Baharun, R., & Muharam, F. M. (2016). Measuring electronic word of mouth review adoption on green purchase intention using source credibility theory. *Advanced Science Letters*, 22(12), 4283-4287.
- Rego, L., Brady, M., Leone, R., Roberts, J., Srivastava, C., & Srivastava, R. (2021). Brand response to environmental turbulence: A framework and propositions for resistance, recovery and reinvention. *International Journal of Research in Marketing*.
- Shajrawi, A. A. (2020). The effect of brand on consumer purchase decision: A case study of Zain company of Telecommunications in Jordan. *International Journal of Advanced Science and Technology*, 29(8), 6060-6077.
- Sundararaj, V., & Rejeesh, M. R. (2021). A detailed behavioral analysis on consumer and customer changing behavior with respect to social networking sites. *Journal of Retailing and Consumer Services*, 58, 102190.
- Tariq, E., Alshurideh, M., Akour, I., & Al-Hawary, S. (2022). The effect of digital marketing capabilities on organizational ambidexterity of the information technology sector. *International Journal of Data and Network Science*, 6(2), 401-408.
- Tullani, H., Saha, R., & Dahiya, R. (2019). Green Innovation and Ethical Responsibility: Do They Improve Customer's Green Purchase Intentions?. In *Green Business: Concepts, Methodologies, Tools, and Applications* (pp. 1032-1047). IGI Global.
- Van Boerdonk, P. J. M., Krikke, H. R., & Lambrechts, W. D. B. H. M. (2021). New business models in circular economy: A multiple case study into touch points creating customer values in health care. *Journal of cleaner production*, 282, 125375.
- Villarreal, M., & Jorgensen, T.D. (2020). Adapting fit indices for Bayesian structural equation modeling: Comparison to maximum likelihood. *Psychological Methods*, 25(1), 46-70.
- Visentin, M., Pizzi, G., & Pichierri, M. (2019). Fake news, real problems for brands: the impact of content truthfulness and source credibility on consumers' behavioral intentions toward the advertised brands. *Journal of Interactive Marketing*, 45, 99-112.
- Xia, Y., & Yang, Y. (2019). RMSEA, CFI, and TLI in structural equation modeling with ordered categorical data: The story they tell depends on the estimation methods. *Behavior Research Methods*, 51(1), 409-428.
- Yen, C. L. A., & Tang, C. H. H. (2019). The effects of hotel attribute performance on electronic word-of-mouth (eWOM) behaviors. *International Journal of Hospitality Management*, 76, 9-18.
- Zhang, L., Chen, L., Wu, Z., Zhang, S., & Song, H. (2018). Investigating young consumers' purchasing intention of green housing in China. *Sustainability*, 10(4), 1044.
- Zhang, X., & Dong, F. (2021). How virtual social capital affects behavioral intention of sustainable clothing consumption pattern in developing economies? A case study of China. *Resources, Conservation and Recycling*, 170, 105616.



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