


# The effect of utilitarian and hedonic motivations on mobile shopping outcomes. A cross-cultural analysis

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## Abstract

Mobile devices are ubiquitous in the lives of modern consumers, who use them for information-seeking and purchasing activities, fostering the emergence of m-commerce. This trend has been exacerbated by the COVID-19 pandemic, which has boosted m-commerce growth in both developed and developing countries. Hence, there is a need for cross-cultural research concerning the factors affecting behavioural intentions. Drawing upon the hedonic information systems model, we measure the impact of utilitarian factors on satisfaction, repurchase intention, and eWOM through the mediation of enjoyment across two countries characterized by different stages of m-commerce readiness and culture: China and Italy. Findings suggest that the impact of utilitarian factors on satisfaction is stronger among Italian users than Chinese users. On the contrary, for Chinese users, who use their mobile phones as a primary device to shop online, the mediation effect of enjoyment on satisfaction and eWOM is stronger. With this study, we contribute to cross-cultural research in m-commerce and provide guidelines to mobile retailers operating in diverse international markets.

## KEYWORDS

cross-country, eWOM, M-commerce, repurchase intention, utilitarian factors

## 1 | INTRODUCTION

M-commerce (or mobile commerce) refers to any consumer's online exchange completed through a mobile device (Chong, 2013a). Due to the growing computational capacity of modern-day mobile devices (i.e., smartphones and tablets) and the availability of broadband internet connections (i.e., 4G and 5G), over the last decade, m-commerce has emerged as the fastest-growing channel to promote and sell products and services (Sun & Xu, 2019). By 2025, it is expected that retail m-commerce sales will reach \$728.28 billion, accounting for 44.2% of all digital retail sales in the US (Meola, 2022). Likewise, the percentage

of consumers switching from traditional e-commerce to m-commerce is still increasing (Hentzen et al., 2021), mainly because mobile devices represent a popular and convenient way to purchase products (Chopdar et al., 2018; Gao et al., 2015; Tang, 2019). Mobile devices can be used by consumers anytime and anywhere; therefore, they are adopted at several stages of the buying process, that is, from the search phase to the actual purchase, and increasingly in the post-purchase phase (Lemon & Verhoef, 2016).

The use of mobile devices has also grown in popularity during the in-store experience, as they can give access to product information or be linked to loyalty cards (Cavalinhos et al., 2021). Moreover, mobile

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marketing can reduce the length of the consumer decision journey bypassing some steps of the traditional decision-making process (Jebarajakirthy et al., 2021). The COVID-19 pandemic represented another booster for m-commerce diffusion. Confined at home, consumers have spent much more time using their portable devices for shopping to overcome physical retailers' closures (Chopdar et al., 2022). In the EU, the m-commerce share increased by 30% during the second quarter of 2020, while in China, m-commerce purchases spiked by 31.3% during lockdowns (OECD, 2020). This tide was more accentuated in emerging economies, where smartphones represent the only internet access for most users (Soto-Acosta, 2020).

Scholars have started investigating the determinants of mobile device usage intention and, consequently, m-commerce acceptance (Chong, 2013a; Chopdar & Sivakumar, 2019; Gao et al., 2015). The current findings highlight consumers mainly adopt mobile devices and e-commerce when they are easy to use, intuitive, useful, interactive, and convenient (Akram et al., 2020). Notwithstanding, few studies have investigated what happens in the post-adoption stage, that is, repurchase intention decisions (Chopdar & Balakrishnan, 2020; McLean et al., 2020). Henceforth, a research gap has emerged concerning the factors affecting consumers' satisfaction, repurchase, and eWOM intention in the m-commerce context (Chopdar et al., 2022).

Furthermore, most previous studies on m-commerce adoption observed the simultaneous role of utilitarian and hedonic motivations (i.e., problem-solvers/utilitarian-factors-driven versus enjoyment-seekers/hedonic-factors-driven) (Ashraf et al., 2021), thus neglecting the potential relationship between these two drivers. Utilitarian motivations are related to the functional evaluation of the m-commerce platform. In contrast, hedonic motivations (i.e., pleasure) refer to the enjoyment that m-commerce provides to its users (Lei & Law, 2019). Scholars recommend more research on the interplay of consumer utilitarian and hedonic motivations (Hellier et al., 2003).

Another gap in m-commerce research concerns the role of culture in m-commerce transactions (Chopdar et al., 2018). Culture is 'the collective programming of the mind that distinguishes the members of one group or category of people from others' (Hofstede et al., 2010, p. 6). Scholars have revealed that cultural differences affect consumers' intention to use m-commerce (Chopdar et al., 2018). Moreover, Zhang et al. (2012) found that perceived enjoyment has a stronger influence on behavioural intention among Asian consumers than among Western ones. However, existing studies on m-commerce adoption have generally focused on a single country (Zhang et al., 2012), while only a few studies have investigated the cross-cultural differences (Chong et al., 2012; Chopdar et al., 2018; Lu et al., 2017; Marinao-Artigas & Barajas-Portas, 2020). Furthermore, most cross-cultural research selected Western countries such as the UK, Australia, or North American countries as representative of Western countries (Ashraf et al., 2021). Consequently, scholars call for additional research across different cultures (Chong et al., 2012; Mishra et al., 2021; Thongpapanl et al., 2018).

To fill these research gaps, the present study adopts a cross-cultural perspective to investigate the effects of m-commerce repurchase intention by comparing Asian and Western consumers. An

Asian country, China, and a Western country, Italy, were chosen for two main reasons: (a) different cultural paradigms characterize Italy and China according to Hofstede's (1980) cultural value dimensions, that is, Italian consumers show a higher level of uncertainty avoidance, individualism, and masculinity, whereas Chinese ones display greater perceived power distance, and long-term orientation (Pratesi et al., 2021); (b) Chinese consumers are heavier users of mobile devices for shopping reasons than Italian users.

This study focuses on m-commerce for fashion products, which represent a form of hedonic shopping (Hirschman & Holbrook, 1982). In the context of IS (information systems) research, scholars extended the Technology Acceptance Model (TAM) to explain users' adoption of hedonic information systems by including a construct, enjoyment, that is more likely to explain users' prolonged use for entertaining and leisure activities versus instrumental or productive ones (Van der Heijden, 2004). Enjoyment plays a crucial role in consumers' perceived value of m-commerce for fashion products (Ko et al., 2009). Hence, we considered enjoyment as a mediator in the relationship between utilitarian motivations and the outcome variables of (a) satisfaction, (b) repurchase intention, (c) and electronic word-of-mouth (eWOM) intentions.

## 2 | THEORETICAL BACKGROUND

### 2.1 | The hedonic model of technology adoption

TAM (Technology Acceptance Model) is a widely adopted framework to analyse technology adoption and its outcomes. The model was developed by Davis (1989). The latter extended the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980) and the Theory of Planned Behaviour (TPB) (Ajzen, 1991) to explain individuals' decision to adopt technology. TAM's original model posits that usefulness—that is, the extent to which users expect that using a specific technology would improve their job performance, and ease of use—that is, the degree of lack of effort involved in adopting a specific technology, both influence users' behavioural intention.

TAM is considered a parsimonious model to analyse traditional technology adoption (i.e., computers in the workplace, mail, cellular phones, and tablets). However, it provides a limited understanding of users' adoption and use of hedonic systems (Lin & Bhattacharjee, 2010). Recently, new constructs have been integrated into TAM to better explain individuals' willingness to adopt and use a technology (McLean et al., 2018; Zhang et al., 2012). Accordingly, some information systems aim to provide a self-fulfilling value to the user, which goes beyond TAM's utilitarian and productive value (Van der Heijden, 2004). The hedonic model of information systems developed by Van der Heijden (2004) posits that enjoyment is a relevant aspect of information systems that do not necessarily provide utilitarian benefits to its users, such as mobile gaming apps. Van der Heijden (2004) suggests that an information system's hedonic or utilitarian nature represents an important demarcation for the explanatory power of traditional technology acceptance models. The hedonic

element relates to the fun or pleasure in the decision to adopt a particular technology regardless of performance consequences (Bruner II & Kumar, 2005). Conversely, the utilitarian factor focuses on consumers' use of technology to achieve their goals (Childers et al., 2001). Hence, new constructs have been integrated into the original model to reflect hedonic information systems' fun and entertaining character (Lin & Bhattacharjee, 2010; Van der Heijden, 2004). Van der Heijden (2004) reveals that perceived enjoyment and perceived ease of use are more prominent predictors of intention to use hedonic information systems (movie website) than perceived usefulness, which is the opposite of what was found in the context of utilitarian system usage (Venkatesh & Davis, 2000). In this study, we focus on a hedonic information system usage that is m-commerce for fashion shopping; hence, the hedonic model of information systems (HMIS) is appropriate for this context. The HMIS implies that hedonic (i.e., enjoyment) and utilitarian factors (i.e., adoption readiness) are relevant in choosing a technology. The model observes that utilitarian factors such as ease of use, value, and technological customization can trigger emotional hedonic responses among users, thus fostering their intention to use new technology (Lowry et al., 2012).

### 2.1.1 | M-commerce adoption across cultures

Culture represents a socialization context that affects individual perceptions of benefits and uses of technology (Pentina et al., 2016). Previous studies have shown that culture affects mobile commerce adoption, leading to discrepancies among countries (Zhang et al., 2012). For instance, Chong et al. (2012) focus on the determinants of consumers' intention to adopt m-commerce and compare the Chinese and Malaysian markets. Their results reveal that Chinese and Malaysian consumers' adoption is influenced by different factors (i.e., age, price, variety of services); still, some factors are in common (i.e., trust and social influence). Chopdar et al. (2018) compare American and Indian consumers, suggesting that perceived risk influences the adoption of m-commerce applications in India, thus reducing the likelihood of shopping online through mobile devices due to cultural differences. Indian people belong to a higher power distance and collectivist culture (Hofstede et al., 2010), making them perceive a higher degree of risk in purchasing through mobile applications.

In comparison, US consumers live in a lower power distance and individualist society; therefore, they tend to use mobile shopping apps more often (Chopdar et al., 2018). Marinao-Artigas and Barajas-Portas (2020) investigate the determinants of satisfaction of m-shoppers from Chile and Mexico, showing some differences between the two countries in the reputation of an m-commerce retailer and functional benefits. Ashraf et al. (2021) compare mobile shoppers' behaviour in nine countries, showing that the adoption of m-commerce differs depending on the market readiness stage. Consumers from markets at an advanced readiness stage tend to be more hedonism-motivated and use m-commerce intentionally/consciously. On the contrary, consumers at an early readiness stage are likely to be more utility-motivated and use m-commerce habitually/unconsciously.

As it emerges from this literature review, few studies have investigated the antecedents and consequences of repurchase intention in m-commerce across cultures, particularly comparing countries with different maturity levels in m-commerce use. Hence, in this study, we analyse the m-commerce adoption in two different cultural contexts, China and Italy, to understand whether culture affects the determinants of repurchase and eWOM intentions. Among their main cultural differences, China is a collectivist country with a high-power distance and a long-term orientation. In contrast, Italy is an individualist country that ranks medium-low on power distance and has a short-term orientation (Hofstede, 1980). Moreover, China and Italy display very different digital markets. China's e-commerce revenues rank first worldwide, accounting for 1412 billion USD sales in December 2021. China has the highest level of mobile commerce readiness globally, as mobile devices are used daily (Hu, 2020). Indeed, mobile retailing accounted for 76% of the total e-commerce size in 2020 (J.P. Morgan, 2020). On the contrary, the Italian e-commerce market is still developing. At the end of 2021, Italy's e-commerce volume amounted to less than 54 billion USD, far behind other European countries such as the United Kingdom and Germany, which reached a sales volume more than twice the Italian one (Statista, 2022). Hence, China and Italy are two culturally different countries, and they also display a contrasting e-commerce landscape, with China representing the first e-commerce market and Italy still lagging, despite being an advanced economy.

## 3 | HYPOTHESES DEVELOPMENT

### 3.1 | Utilitarian factors

McLean et al. (2018) conceptualized and tested utilitarian factors as a multi-dimensional higher-order construct, including ease of use, convenience, and customization, directly affecting the consumer experience with m-commerce retailer platforms. Higher-order constructs make theoretical models more parsimonious as they reduce the number of hypothesized relationships (Sharma et al., 2021; Thien, 2020). Agrebi and Jallais (2015) reveal that ease of use and usefulness influence satisfaction during shopping on mobile devices. Scholars have shown that consumers tend to stick with a mobile platform when they perceive it as more convenient for shopping than a physical store (Flavián et al., 2006; Shankar et al., 2011). Mobile platforms provide several benefits to their users; for instance, they shorten the time required to complete an online transaction (Eppmann et al., 2018; Hofacker et al., 2016) and enable them to rapidly compare various prices options (Santos & Gonçalves, 2019). Convenience is the possibility to purchase from anywhere and at any time. Convenience has also been analysed as an antecedent of satisfaction and intention to use mobile shopping (Agrebi & Jallais, 2015). Finally, customization is particularly important in m-commerce for fashion items. By creating profiles with their image after providing information about their height and weight, consumers can use virtual dressing rooms to dress their virtual models with the e-commerce items (Blázquez, 2014).

Thus, online retailers can send notifications and recommendations based on consumers' preferences and requirements (Blázquez, 2014). Based on this literature, we argue that utilitarian factors enhance consumers' satisfaction because they influence the efficiency and convenience of mobile shopping.

**Hypothesis 1.** Utilitarian factors (a higher-order construct composed of ease of use, convenience, and customization) will have a positive significant impact on consumer satisfaction in m-commerce.

Existing studies have provided evidence of the role of utilitarian factors on repurchase intention in e-commerce (Kim et al., 2012; Kumar & Ayodeji, 2021). We argue that the utilitarian factors are particularly important for m-commerce because the channel has a lower screen size and limited processing capabilities (Li & Yeh, 2010). Hence, if consumers repeat their purchase, they find the platform easy and convenient to use. Indeed, mobile channels that provide convenient access add value to consumers' shopping, increasing their spending and likelihood of repurchasing through the same channel (Wang et al., 2015). Thus, we hypothesize:

**Hypothesis 2.** Utilitarian factors (a higher-order construct composed of ease of use, convenience, and customization) will have a positive significant impact on repurchase intention in m-commerce.

A pleasant post-purchase experience can activate consumers' eWOM, which involves sharing consumers' experience with purchased products in the form of online reviews and ratings on social media platforms, online communities, or product review websites (Filieri, 2015). In particular, for Chinese people, other consumers' product evaluation represents a significant reference factor in the purchase decision (Filieri et al., 2018; Zhang et al., 2011). Chinese young consumers easily access fashion information from websites, social media or peers (Su & Tong, 2020). Previous studies have demonstrated that consumers are increasingly willing to share eWOM, reducing product and service uncertainty, and triggering purchase intention (Amblee & Bui, 2008; Filieri, 2015). Accordingly, it has been observed how the characteristics of digital platforms, such as ease of use and usefulness, significantly influence the intention to continue using eWOM platforms (Filieri et al., 2020). First, if users perceive their navigation experience to be hassle-free, they will be more likely to continue using these platforms and comment about their consumption experiences. This phenomenon is explained by the fact that the more a platform is easy to use and intuitive, the easier it will be for the user to share feedback (Khammash & Griffiths, 2011). The ease of use and usefulness of social media platforms influence consumer intention to engage with them (Bazi et al., 2020). Therefore, we hypothesize as follows:

**Hypothesis 3.** Utilitarian factors (a higher-order construct composed of ease of use, convenience, and

customization) will have a positive significant impact on eWOM in m-commerce.

### 3.2 | Enjoyment

Enjoyment embodies the hedonic aspect of shopping, as consumers not only shop for utilitarian purposes but also to fulfil relaxation and fun needs (Blázquez, 2014; Childers et al., 2001). Perceived enjoyment represents the extent to which using the technology is seen as enjoyable (Nysveen et al., 2005). Although some consumers may use m-commerce for utilitarian scopes, they still want to have fun and enjoy the m-commerce shopping experience, especially when browsing hedonic products like fashion items. Hence, the hedonic and utilitarian motivations are copresent in m-commerce. However, as Childers et al. (2001) suggest, one may be more dominant than the other in different contexts. For instance, Chong (2013b) found that Chinese consumers use m-commerce activities more if they find them enjoyable. Moreover, Zhang et al. (2012) found that perceived enjoyment is one of the most significant constructs in m-commerce adoption and has a stronger influence among Eastern countries than in Western ones.

In this study, we posit that enjoyment is a crucial mediating factor between the utilitarian factor and the consumer experience outcome in m-commerce (Bölen et al., 2021; McLean et al., 2018). First, considering usefulness and ease of use represent a necessary condition of enjoyment, a mobile commerce application that only focuses on functional benefits will not successfully produce satisfied consumers (Eppmann et al., 2018). Therefore, we hypothesize:

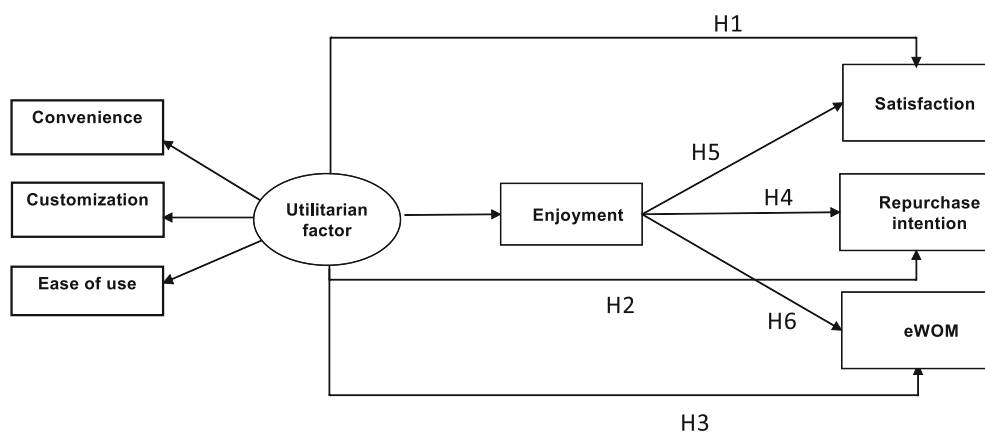
**Hypothesis 4.** Enjoyment significantly mediates the causal relationship between utilitarian factors and consumer satisfaction in m-commerce.

Second, if a consumer enjoys browsing fashion items, they will be more likely to continue using the same shopping platform in the future. Indeed, hedonic browsing has been found to affect impulse-buy at special events (Zheng et al., 2019). Previous studies have highlighted that the hedonic factor mediates the effects of utilitarian factors on consumer behaviour outcomes, that is, usage and purchase (Davis et al., 2013). Therefore, we hypothesize the following:

**Hypothesis 5.** Enjoyment mediates the impact of utilitarian factors on repurchase intention in m-commerce.

Third, enjoyment has also been found to positively affect eWOM and social participation (Shin et al., 2018). Scholars reveal that enjoyment is a critical motivation for consumers to post positive reviews about the hotel rooms they booked (Hu & Kim, 2018; Rouibah et al., 2021). This study focuses on consumers' enjoyment of using an m-commerce platform. We argue that consumers who enjoy browsing an m-commerce fashion platform will be keener to spread positive experiences with it online. Therefore, we posit:

**FIGURE 1** Theoretical model. Utilitarian factor represents a higher-order factor measured by the lower-order ease of use, convenience, and customization



**Hypothesis 6.** Enjoyment mediates the impact of utilitarian factors on eWOM in m-commerce. Figure 1 presents the theoretical model of the study.

## 4 | METHODOLOGY

### 4.1 | Research design and sample

We conducted an online survey to measure the constructs of our conceptual model, collecting responses from consumers from Italy and China in September–October 2019. We used Qualtrics to collect responses from a non-probabilistic sample of university students in China and Italy. University students have been used as a sample in previous cross-cultural studies as they represent a significant segment of mobile users with digital media skills (Smith et al., 2013).

The questionnaire asked respondents to consider their last m-commerce fashion items' purchases. Fashion was selected as the setting of our analysis as mobile channels have been proven to be particularly relevant in commercializing fashion products worldwide (Statista, 2022).

The questionnaire was translated from English to Italian and Chinese using the back-translation procedure for cross-cultural research (Brislin, 1970). Next, we compared the two versions to eliminate discrepancies ensuring the accuracy of the translation (Bian & Forsythe, 2012).

After removing incomplete responses, our final sample comprised 308 respondents, 155 from Italy and 153 from China. In the Italian sample, 54% were female, and 94.8% were 18–24 years old. Similarly, the Chinese sample was mostly women (71.9%) aged 18–24 (90.9%). We also asked about the average monthly expenditure and yearly family income: the average income of Italian respondents was in the range of 40,000 and 80,000 euros per year, and their expenditure was lower than 500 euros per month; the Chinese respondents' average family income was less than 200,000 RMB (about 25,000 euros) per year (58.7%), and their expenditure was lower than 5000 RMB (about 600 euros) per month.

### 4.2 | Constructs measures

The constructs adopted in this study were adapted from established scales used in previous studies (Agrebi & Jallais, 2015; Brown et al., 2005; Khalifa & Liu, 2007; McLean et al., 2018; Natarajan et al., 2017; Rose et al., 2012; Singh & Swait, 2017). Likert type, seven-point (from 1 = 'strongly disagree' to 7 = 'strongly agree') multi-item scales were used to measure the constructs. The wording of each item is provided in Table 1.

## 5 | RESULTS

### 5.1 | Data analysis

Partial least squares structural equation modelling (PLS-SEM) was adopted for data analysis. PLS needs less strict rules regarding normality issues, sample size, and measurement scale (Hair et al., 2017). PLS can simultaneously analyse the measurement model testing (reliability and validity) and structural model testing. Another significant advantage is that PLS enables researchers to analyse the model covering formative and reflective constructs (Arya et al., 2021; Dash & Paul, 2021). Hence, SmartPLS 3.2.8 software was used to analyse the two-step approach, including the measurement and testing of the structural model in this research.

A sample size of 155 for Italy and 153 for China are sufficient for PLS-SEM, with current research suggesting that a sample should be higher than 100 respondents (Reinartz et al., 2009). Apart from this, G\*Power analysis was applied to find the minimum required sample size (Faul et al., 2009). Based on this analysis, we found that having a minimum of 129 sample sizes for each group is enough. Hence, the sample size for Italy and China significantly met both criteria.

In terms of normality issues, we utilized a calculator-based on webpower (Sharma et al., 2021; Zhang & Yuan, 2018) to check the data for multivariate normality through Mardia's (1970) test. Mardia's multivariate skewness was  $\beta = 10.3597$   $p < .01$ , while the multivariate kurtosis was  $\beta = 81.9820$ ,  $p < .01$ . DeCarlo (1997) stated that skewness's requirement cut-off value is  $-1$  and  $+1$ , while the value of kurtosis is  $-20$  and  $+20$ . Hence, this shows that the data is not distributed normality. However, we tested our research model via

**TABLE 1** Descriptive of the measurement items

<i>Measurement items</i>
1 = strongly disagree, 7 = strongly agree
<i>Convenience</i> (Singh & Swait, 2017)
Shopping on m-commerce platforms (for example, through APP) is convenient for managing my time.
Shopping on m-commerce platforms makes my life easier.
Shopping on m-commerce platforms fits with my schedule.
<i>Customization</i> (Rose et al., 2012)
It feels like m-commerce platforms are talking personally to me as a customer.
It is important to me that m-commerce platforms feel like my personal area when I use them.
I like it when I can customize the m-commerce platforms to my own liking.
<i>Ease of use</i> (Natarajan et al., 2017)
Purchasing on m-commerce platforms is easy for me
Mobile payments are easy to use
Overall, I believe that m-commerce platforms are easy to use
Learning to use m-commerce platforms is easy for me
Interacting with brands on m-commerce platforms is flexible
<i>Enjoyment</i> (McLean et al., 2018; Natarajan et al., 2017)
I find using m-commerce platforms to be enjoyable
The actual process of using m-commerce platforms for shopping is pleasant
I have fun using m-commerce platforms
<i>Satisfaction</i> (Agrebi & Jallais, 2015)
Overall, I am satisfied with my experience on m-commerce platforms
I am satisfied with the pre-purchase experience of m-commerce platforms (e.g., product search, quality of information about products, product comparison)
I am satisfied with the purchase experience of m-commerce platforms (e.g., ordering, payment procedure)
I am satisfied with the post-purchase experience of m-commerce platforms (e.g., customer support and after-sales support, handling of returns/refunds, delivery care)
My choice to use m-commerce platforms was a wise one
<i>eWOM</i> (Brown et al., 2005)
I made sure that others know that I purchased from this m-commerce platform
I spoke positively about this m-commerce platform to others
I recommended this m-commerce platform to others
<i>Repurchase intention</i> (Khalifa & Liu, 2007)
It is likely that I will repurchase from m-commerce platforms in the near future
I regularly repurchase from the same m-commerce platforms
I expect to repurchase from m-commerce platforms in the near future

PLS-SEM since PLS-SEM can overcome non-normality issues (Dash & Paul, 2021; Ringle et al., 2012).

After ensuring that the sample size was sufficient for both groups and checking the normality issue, the VIF values were examined to

test for common method bias (Kock, 2015). VIF results of 3.051 for China and 1.759 for the Italian sample indicate that common method bias is not a significant problem for this study (Kock, 2015).

## 5.2 | Measurement model testing

We assessed the measurement model, including both reflective and composite constructs. First, we checked the reliability and validity of the reflective constructs (satisfaction, enjoyment, purchase intention, and eWOM). This was expanded to cover three reflective dimensions of utilitarian factors: convenience, ease of use, and customization. As the next step, utilitarian factors were established as a higher-order composite construct based on their related dimensions for both the Italian and Chinese samples.

Table 2 shows the factor loadings, reliability, and convergent validity of the reflective constructs in the model. Based on composite reliability, each construct was higher than 0.8 for both samples, satisfying the minimum requirement of 0.70 (Nunnally, 1967). The AVE values for all constructs in both samples were higher than the least recommended value of 0.50, showing that the items met convergent validity (Bagozzi & Yi, 1988). Moreover, as required, Cronbach's alpha and rho\_A exceeded 0.70 for both samples. Regarding factor loadings, we have a few construct loadings between 0.5 and 0.7 in the Italian sample. However, as Hair et al. (2010) suggested, those loadings can be accepted if CR and AVE values can meet the required threshold. Accordingly, all reflective constructs in this study have adequately satisfied the validity and loading requirements for both samples.

The variables with higher-order and lower-order constructs were examined to see whether discriminant validity performed well. Discriminant validity was evaluated with two criteria: Fornell and Larcker's (1981) criterion and heterotrait-monotrait (HTMT). Fornell-Larcker criterion was met in both samples. The existing literature suggests that the recommended HTMT value should be smaller than 0.95. Gaskin et al. (2018) and Benitez et al. (2020) stated that the HTMT ratio should be less than 1.00. Tables 3–6 illustrate that discriminant validity was met in this study for both samples.

Before assessing the structural model, utilitarian factors as a higher-order construct were evaluated in the measurement model using a two-stage approach (Ringle et al., 2012). This approach is based on the evaluation of the latent formative construct. We obtained the latent variable scores for the sub-constructs in the initial stage as, in Ogbeibu et al.'s (2018) study. In the next stage, all sub-constructs are provided by their respective latent variable scores (Ogbeibu et al., 2018). The LTV construct scores are presented as indicators in the higher-order construct's measurement model (AlNuaimi et al., 2021). The scores of the sub-constructs (ease of use, convenience, and customization) constitute variables of the latent construct (utilitarian factors) and have been added to the structural model. We also checked Cronbach alpha, composite reliability (CR), AVE, and Rho\_A values. All values met the requirement, as shown in Table 2.

After this stage, we checked the variance inflation factors (VIF) (Rasoolimanesh & Ali, 2018). For both samples, VIF values of latent

**TABLE 2** Reliability and validity of measurement model for lower-order constructs

	Italy		China	
	Loadings & reliability and validity		Loadings & reliability and validity	
Convenience				
CON1	0.861	$(\alpha = .717, CR = 0.842, AVE = 0.641, Rho\_A = 0.734)$	0.951	$(\alpha = .934, CR = 0.958, AVE = 0.883, Rho\_A = 0.934)$
CON2	0.830		0.955	
CON3	0.702		0.912	
Customization				
CUS1	0.763	$(\alpha = .702, CR = 0.834, AVE = 0.627, Rho\_A = 0.700)$	0.862	$(\alpha = .814, CR = 0.889, AVE = 0.821, Rho\_A = 0.728)$
CUS2	0.831		0.843	
CUS3	0.780		0.855	
Ease of use				
EOU1	0.849	$(\alpha = .890, CR = 0.921, AVE = 0.700, Rho\_A = 0.895)$	0.941	$(\alpha = .916, CR = 0.939, AVE = 0.755, Rho\_A = 0.926)$
EOU2	0.889		0.913	
EOU3	0.912		0.897	
EOU4	0.823		0.889	
EOU5	0.693		0.680	
Enjoyment				
ENJ1	0.931	$(\alpha = .929, CR = 0.955, AVE = 0.876, Rho\_A = 0.929)$	0.968	$(\alpha = .964, CR = 0.977, AVE = 0.933, Rho\_A = 0.964)$
ENJ2	0.937		0.971	
ENJ3	0.940		0.959	
Satisfaction				
STF1	0.858	$(\alpha = .874, CR = 0.908, AVE = 0.664, Rho\_A = 0.867)$	0.877	$(\alpha = .921, CR = 0.941, AVE = 0.760, Rho\_A = 0.925)$
STF2	0.813		0.862	
STF3	0.854		0.909	
STF4	0.730		0.840	
STF5	0.813		0.870	
eWOM				
ewom1	0.530	$(\alpha = .763, CR = 0.852, AVE = 0.670, Rho\_A = 0.918)$	0.863	$(\alpha = .908, CR = 0.943, AVE = 0.846, Rho\_A = 0.941)$
ewom2	0.925		0.958	
ewom3	0.936		0.935	
Repurchase intention				
RI1	0.903	$(\alpha = .854, CR = 0.911, AVE = 0.774, Rho\_A = 0.870)$	0.927	$(\alpha = .884, CR = 0.928, AVE = 0.812, Rho\_A = 0.890)$
RI2	0.831		0.871	
RI3	0.903		0.904	
For higher-order constructs				
Utilitarian				
Convenience_UT	0.826	$(\alpha = .724, CR = 0.844, AVE = 0.644, Rho\_A = 0.736)$	0.935	$(\alpha = .863, CR = 0.917, AVE = 0.787, Rho\_A = 0.882)$
Customization_UT	0.744		0.791	
Ease of Use_UT	0.835		0.928	

constructs are less than 5, varying between 1.329 and 3.924. Further, the criteria of latent constructs' weights were significantly met based on the confidence interval approach. Lastly, to achieve nomological validity, as suggested by Henseler (2017) and Rasoolimanesh and Ali (2018), the fit indices (e.g., the Standardized Root Mean Square Residual-SRMR) should not be less strong than the previous model before adding the composite construct. In this study, the values of SRMR were lower than 0.08 for both samples, which is the suggested threshold before and after adding the composite construct. These

results show a valid model fit and nomological validity for the utilitarian factors as a higher-order construct.

### 5.3 | Structural model testing

We used the variance explained ( $R^2$ ) to examine the model's explanatory power. Sarstedt et al. (2014) stated that  $R^2$  values of 0.25, 0.50, and 0.75 reflect weak, moderate, and substantial values, respectively.

	eWOM	RI	CON	CUS	EOU	ENJ	STF
<i>Italy</i>							
eWOM	0.819						
RI	0.556	0.88					
CON	0.380	0.571	0.8801				
CUS	0.452	0.401	0.454	0.792			
EOU	0.455	0.581	0.550	0.421	0.837		
ENJ	0.521	0.630	0.605	0.494	0.540	0.936	
STF	0.520	0.704	0.507	0.507	0.755	0.685	0.815
<i>China</i>							
eWOM	0.920						
RI	0.276	0.901					
CON	0.284	0.785	0.940				
CUS	0.379	0.476	0.606	0.853			
EOU	0.316	0.815	0.852	0.583	0.869		
ENJ	0.420	0.718	0.773	0.644	0.764	0.966	
STF	0.411	0.742	0.785	0.699	0.782	0.858	0.872

Abbreviations: CON, convenience; CUS, customization; ENJ, enjoyment; EOU, ease of use; eWOM, eWOM; RI, repurchase intention; STF, satisfaction.

**TABLE 3** Discriminant validity of constructs with lower-order constructs (Fornell-Larcker)

	eWOM	RI	CON	CUS	EOU	ENJ	STF
<i>Italy</i>							
eWOM							
RI	0.641						
CON	0.447	0.720					
CUS	0.613	0.515	0.630				
EOU	0.484	0.656	0.664	0.535			
ENJ	0.546	0.700	0.671	0.610	0.593		
STF	0.560	0.803	0.745	0.652	0.849	0.742	
<i>China</i>							
eWOM							
RI	0.304						
CON	0.302	0.861					
CUS	0.435	0.552	0.690				
EOU	0.342	0.902	0.918	0.675			
ENJ	0.441	0.776	0.814	0.722	0.813		
STF	0.442	0.814	0.842	0.801	0.849	0.906	

Abbreviations: CON, convenience; CUS, customization; ENJ, enjoyment; EOU, ease of use; eWOM, eWOM; RI, repurchase intention; STF, satisfaction.

**TABLE 4** Discriminant validity of constructs with lower-order constructs (Heterotrait-Monotrait [HTMT])

For the Italian sample, the  $R^2$  values of 0.43 (enjoyment), 0.33 (eWOM), 0.49 (repurchase intention), and 0.66 (satisfaction) for the endogenous variables in the model are to be considered moderate. For the Chinese sample, the  $R^2$  values of 0.67 (enjoyment), 0.17 (eWOM), 0.64 (repurchase intention), and 0.80 (satisfaction) for the endogenous variables in the model are to be substantial. This result illustrates a substantial degree of variance explained by the predictors in our framework. Further, to evaluate the structural model, effect sizes are one of the thresholds that ought to be considered. Lowry

and Gaskin (2014) stated that effect sizes of 0.02, 0.15, and 0.35 point out small, medium, and large effects. Hence, we also added effect size in the structural estimation tables to show the effect sizes of the relationships.

The PLS algorithm and the bootstrapping re-sampling method with 155 cases for Italy and 153 cases for China samples separately, and 5000 re-samples were applied to assess the structural model. Tables 7–9 illustrate the findings of the hypothesis testing for China and Italy. When looking at Table 7, all hypotheses are supported

**TABLE 5** Discriminant validity of constructs with the higher-order construct (Fornell-Larcker)

	Italy					China				
	ENJ	eWOM	RI	STF	UTI	ENJ	eWOM	RI	STF	UTI
ENJ	<b>0.936</b>					<b>0.966</b>				
eWOM	0.516	<b>0.821</b>				0.420	<b>0.920</b>			
RI	0.628	0.556	<b>0.880</b>			0.718	0.276	<b>0.901</b>		
STF	0.679	0.519	0.704	<b>0.815</b>		0.858	0.411	0.743	<b>0.872</b>	
UTI	0.657	0.530	0.652	0.784	0.803	0.820	0.361	0.792	0.850	0.887

Note: Bold values are the square roots of AVE values.

Abbreviations: ENJ, enjoyment; eWOM, eWOM; RI, repurchase intention; STF, satisfaction; UTI, utilitarian factors as a highest order construct.

**TABLE 6** Discriminant validity of constructs with the higher-order construct (Heterotrait-Monotrait [HTMT])

	Italy					China				
	ENJ	eWOM	RI	STF	UTI	ENJ	eWOM	RI	STF	UTI
ENJ										
eWOM	0.546					0.441				
RI	0.700	0.641				0.776	0.304			
STF	0.742	0.560	0.803			0.906	0.442	0.814		
UTI	0.801	0.658	0.816	0.966		0.897	0.410	0.888	0.950	

Abbreviations: ENJ, enjoyment; eWOM, eWOM; RI, repurchase intention; STF, satisfaction; UTI, utilitarian factors as a highest order construct.

**TABLE 7** Structural estimations for both samples (hypotheses testing)

	$\beta$	Standard deviation (STDEV)	T statistics ( $ O/STDEV $ )	p values	Effect size ( $f^2$ )
Hypothesis 1: Utilitarian factors $\rightarrow$ satisfaction	.594	0.053	11.121	.000*	0.517
Hypothesis 2: Utilitarian factors $\rightarrow$ repurchase intention	.469	0.065	7.223	.000*	0.231
Hypothesis 3: Utilitarian factors $\rightarrow$ eWOM	.223	0.078	2.898	.004**	0.028
Hypothesis 4: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ repurchase intention	.260	0.054	4.838	.000*	-
Hypothesis 5: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ satisfaction	.220	0.041	5.426	.000*	-
Hypothesis 6: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ eWOM	.206	0.066	3.113	.002**	-

\* $p < .001$ ; \*\* $p < .005$ .

**TABLE 8** Structural estimations for Italy (hypotheses testing)

	$\beta$	Standard deviation (STDEV)	T statistics ( $ O/STDEV $ )	p values	Effect size ( $f^2$ )
Hypothesis 1: Utilitarian factors $\rightarrow$ satisfaction	.598	0.064	9.251	.000*	0.597
Hypothesis 2: Utilitarian factors $\rightarrow$ repurchase intention	.419	0.084	5.037	.000*	0.200
Hypothesis 3: Utilitarian factors $\rightarrow$ eWOM	.337	0.085	3.940	.000*	0.096
Hypothesis 4: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ repurchase intention	.236	0.063	3.647	.000*	-
Hypothesis 5: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ satisfaction	.189	0.049	3.856	.000*	-
Hypothesis 6: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ eWOM	.197	0.069	2.803	.005**	-

\* $p < .001$ ; \*\* $p < .005$ .

**TABLE 9** Structural estimations for China (hypotheses testing)

	$\beta$	Standard deviation (STDEV)	T statistics ( $ O/STDEV $ )	p values	Effect size ( $f^2$ )
Hypothesis 1: Utilitarian factors $\rightarrow$ satisfaction	.440	0.068	6.513	.000*	0.328
Hypothesis 2: Utilitarian factors $\rightarrow$ repurchase intention	.618	0.088	7.013	.000*	0.352
Hypothesis 3: Utilitarian factors $\rightarrow$ eWOM	.050	0.117	0.450	.653	0.001
Hypothesis 4: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ repurchase intention	.169	0.076	2.263	.024***	-
Hypothesis 5: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ satisfaction	.403	0.059	6.838	.000*	-
Hypothesis 6: Utilitarian factors $\rightarrow$ enjoyment $\rightarrow$ eWOM	.309	0.106	2.917	.004*	-

\* $p < .001$ ; \*\*\* $p < .05$ .

for the whole sample together. In Tables 8 and 9, the findings demonstrate the significant effects of utilitarian factors on satisfaction and repurchase intention in both cases (Hypothesis 1 and Hypothesis 2). On the contrary, the effects of utilitarian factors on eWOM were significant for Italy but not China. Hence, while Hypothesis 3 is supported for the Italian sample, it is rejected for the Chinese sample.

To understand the mediation role of enjoyment between independent and dependent variables in both samples, we applied the bootstrapping procedure as suggested by Zhao et al. (2010). A mediation effect occurs when the indirect effect is significant. Based on our results, Hypothesis 4, Hypothesis 5 and Hypothesis 6 were significantly supported for both Italy and China. Hence, findings confirm the mediating role of enjoyment between utilitarian factors and satisfaction, eWOM, and purchase intention.

## 5.4 | Multi-group analysis

Before applying multi-group analysis (MGA) between two groups through SEM, measurement invariance testing should be performed (Hair et al., 2017). Hence, the measurement invariance of a composite model (MICOM) assessment was performed through the permutation test. MICOM is a three-step procedure consisting of (a) the establishment of compositional invariance assessment, (b) an assessment of equal means and variances, and (c) configural invariance assessment. Based on the PLS-SEM results, partial measurement invariance was established for both groups (Table 10). This enables us to compare and interpret the MGA groups' path coefficients (Henseler et al., 2016).

Having established partial measurement invariance, the next step is to evaluate the MGA using PLS-MGA bootstrapping approach. This step allows us to see path coefficients and significance levels for both groups (Italy and China users) by simultaneously comparing directly group-specific bootstrap estimates. Based on this method,  $p$  values should be .05, or lower than .05, and should be .95, or higher than .95, demonstrating a significant difference between path coefficients across both groups (Henseler et al., 2009). Table 11 illustrates the findings of PLS-MGA, that is,

whether there are significant differences between the two groups. The findings reveal significant differences for each relationship except for the relationship between enjoyment and repurchase intention and the relationship between enjoyment and eWOM. There is no significant difference between Italian and Chinese users regarding the effect of enjoyment on repurchase intention ( $p = .927$ ). Additionally, the findings illustrate no significant difference between Italian and Chinese users for the relationship between enjoyment and eWOM ( $p = .281$ ).

On the other hand, the impact of utilitarian factors on eWOM and satisfaction is much higher among Italian than Chinese users. However, the effect of utilitarian factors on enjoyment and purchase intention is much higher for Chinese users than for Italian users. Lastly, the effect of enjoyment on satisfaction is much higher for Chinese users than for Italian users.

## 6 | FINDINGS AND THEORETICAL IMPLICATIONS

### 6.1 | Findings

Our study provides evidence that m-commerce antecedents and behavioural intentions are affected by cultural differences (Zhang et al., 2012) and depend on the country's stage of m-commerce readiness (Ashraf et al., 2021; Chopdar et al., 2018; Thongpapanl et al., 2018).

Comparing the two samples, the influence of utilitarian factors on satisfaction is stronger among Italian users than Chinese users, suggesting that they tend to be more satisfied with their m-commerce experience if they can accomplish tasks easily, conveniently, and with personalization features fitting their needs. Moreover, our findings show that Italian consumers, who also belong to a culture characterized by a high level of uncertainty avoidance (Italy scores of 75 out of 100 in the Hofstede et al.'s (2010) cultural value framework), are likely to spread eWOM if the m-commerce experience meets utilitarian motivations. On the contrary, the effect of utilitarian factors on eWOM was not significant in the Chinese sample (China scores 24 for uncertainty avoidance).

TABLE 10 MICOM results

Composite	c value (=1)	CI 95%	Step 2. Compositional invariance
Utilitarian factor	0.999	[0.968; 1.000]	Yes
eWOM	0.998	[0.984; 1.000]	Yes
Enjoyment	1.000	[0.999; 1.000]	Yes
Repurchase intention	1.000	[0.999; 1.000]	Yes
Satisfaction	1.000	[0.999; 1.000]	Yes
Composite	Logarithm of variances ratio (=0)	CI 95%	Step 3a. Equal mean values
Utilitarian factor	−0.593	[−0.225; 0.220]	No
eWOM	−0.166	[−0.225; 0.218]	Yes
Enjoyment	−0.784	[−0.217; 0.217]	No
Repurchase intention	−0.630	[−0.210; 0.229]	No
Satisfaction	−0.311	[−0.219; 0.228]	No
Composite	Difference of mean value (=0)	CI 95%	Step 3b. Equal variances?
Utilitarian factor	−0.220	[−0.473; −0.495]	Yes
eWOM	−0.139	[−0.255; 0.247]	Yes
Enjoyment	0.496	[−0.303; 0.353]	No
Repurchase intention	0.573	[−0.397; 0.426]	No
Satisfaction	−0.035	[−0.463; 0.481]	Yes

TABLE 11 Multi-group analysis results

	Coefficients			p value (Italian vs China)
	Italy	China	Coefficients-difference ( China – Italy )	
Utilitarian factor → eWOM	0.332	0.028	0.304	.975
Utilitarian factor → enjoyment	0.651	0.819	0.168	.010
Utilitarian factor → repurchase intention	0.432	0.670	0.238	.022
Utilitarian factor → satisfaction	0.620	0.434	0.186	.969
Enjoyment → eWOM	0.301	0.397	0.095	.281
Enjoyment → repurchase intention	0.347	0.170	0.177	.927
Enjoyment → satisfaction	0.275	0.503	0.228	.013

Interestingly, the mediation effect of enjoyment was supported in the relationship between utilitarian motivations and consumer satisfaction, repurchase intention, and eWOM for both samples. A funny, pleasant, amusing browsing experience fosters consumer satisfaction, repurchase, and eWOM intentions in m-commerce. This result supports the findings of Zheng et al. (2019), who found that utilitarian browsing had an indirect influence on the urge to buy impulsively via affecting hedonic browsing behaviour in e-commerce. We found a significant difference between Italian and Chinese consumers in the mediation effect of enjoyment between utilitarian factors and consumer satisfaction, which might be due to cultural differences in the usage of m-commerce (i.e., maturity of m-commerce). We reveal that the effect of enjoyment on satisfaction is much higher for Chinese users than Italian users suggesting that Chinese consumers derive

satisfaction from the pleasure of browsing fashion items through mobile apps, while Italian consumers are more utilitarian-oriented while they shop through their mobile phones. Therefore, ease of use, flexibility, convenience of use (e.g., 'on the go'), and usability are prominent determinants of Italian consumers' satisfaction. In contrast, while for Chinese consumers, these factors are probably a given, and therefore they would value the entertainment features of mobile apps. Shopping is one of the primary activities for Chinese online users, and enjoyment fosters their satisfaction with m-commerce platforms. Our results confirm the study by Lu et al. (2017), according to which US consumers, who belong to a culture that scores high on individualism (i.e., similarly to Italy, but much higher than Italy), consider practical values of m-shopping at a higher degree than Chinese consumers.

These findings can also be explained by comparing e-commerce and m-commerce diffusion in Italy and China. In China, the e-commerce sector is more advanced than in the United States and Western Europe (Chen et al., 2020). Regarding m-commerce, in Italy, the number of consumers shopping online through mobile phones is relatively low; 43.5% of online retail sales are completed through mobile phones in Italy instead of a percentage of 76% in China (J.P. Morgan, 2020; Statista, 2021). Thus, although Chinese users nowadays are familiar with m-commerce applications, these may still be relatively new to Italian consumers, which is paradoxical considering Italy is a developed country and China is considered a developing country.

## 6.2 | Theoretical implications

Findings advance knowledge on the importance of cultural differences in mobile commerce strategies (Min et al., 2008; Zhang et al., 2012). In detail, this study measured the impact of utilitarian factors on satisfaction, repurchase intention, and eWOM intentions by considering the mediating role of enjoyment. Results show how the functional value deriving from the fulfilment of utilitarian quest positively influences enjoyment and post-adoption intention, such as repurchase intention and eWOM. Likewise, whether a consumer perceives a mobile device as suitable for the selected scope, they will be more satisfied with the entire purchase process (Bilro et al., 2021).

Henceforth, this study addresses the need for research on the antecedents and consequences of m-commerce at the post-adoption stage of decision-making and across international markets with different stages of m-commerce readiness (Ashraf et al., 2021; Chopdar et al., 2018; McLean et al., 2018; Thongpapanl et al., 2018). Theoretically, this study extends research on the hedonic information systems model to m-commerce for fashion items in cross-cultural contexts. Including enjoyment in the proposed model also addresses the call for studies on the influence of utilitarian factors on hedonic perceptions (Lowry et al., 2012) and technology adoption models (Paul & Bhukya, 2021). We also confirm the validity of McLean et al. (2018)'s measurement of the utilitarian construct as a multi-dimensional construct comprising the traditional TAM constructs of ease of use, convenience, and customization, representing the personalization of content and services to the preferences and interests of consumers.

## 7 | MANAGERIAL IMPLICATIONS

The study provides several managerial implications for retailers selling their products through mobile applications in Eastern and Western countries. We recommend that app developers design mobile shopping environments that suit consumers' specific preferences from different countries. By doing so, online retailers can activate consumer satisfaction, word of mouth, and repurchase intention (Filieri & Lin, 2017).

In particular, we have highlighted how young Chinese consumers enjoy shopping for fashion on mobile devices. In contrast, for Italian consumers, mobile shopping is preferred for its efficiency and capacity to minimize efforts or costs. We may observe that Italian consumers only shop for products through their mobile apps if they perceive a high functional value. At the same time, Chinese consumers will also do it because they enjoy this activity and perceive low risks. Accordingly, Chinese consumers enjoy shopping on their phones, while Italian consumers focus more on the utilitarian function of mobile apps, for instance, ease of use, flexibility, and convenience.

Therefore, marketing managers in China should focus on developing enjoyable experiences to prevent consumers from switching to a different platform. Instead, marketing managers operating in Italy and similar contexts should focus on the functional benefits of m-commerce, as some Western consumers tend to base their purchase decision on utilitarian considerations.

Functional platforms will also facilitate eWOM among Italian shoppers. In this country, eWOM appears to be based on what can be achieved using the platform. While in China, app developers should focus more on providing entertaining mobile environments, such as integrating influencers' reviews, by providing videos of the products and how they are used, and connection to social networking platforms (e.g., WeChat, Little Red Book, and Douyin), and the like.

## 8 | LIMITATIONS AND FUTURE STUDIES

In this study, we analysed consumer behaviour in two countries, Italy and China, which are characterized by different cultures and diverse stages of m-commerce readiness. To verify the generalizability of the findings, future research in m-commerce adoption should focus on different geographical samples, for instance, other emerging economies. Moreover, as the data collection was carried out before the COVID-19 outbreak, it is compelling to analyse m-commerce adoption after the major impact of the pandemic (Paul & Bhukya, 2021). Furthermore, a limitation of this study is represented by the fact that our respondents are mostly young consumers aged 18–24 (95%). Although the homogeneity of the sample fosters the findings' generalizability to this age cohort, future studies could focus on different age cohorts. Indeed, an interesting venue for research is represented by the e-commerce behaviour of elderly consumers, who have changed consumption habits and increased online purchases during COVID-19 (Guthrie et al., 2021).

Finally, our model focused on hedonic fashion products. Previous studies on utilitarian products (i.e., phone cards; Cai & Xu, 2006) have found that enjoyment did not predict satisfaction and loyalty in e-commerce. Thus, it would be interesting to assess whether enjoyment has a mediating role in purchasing utilitarian products. For instance, mobile financial services represent widespread product categories (Gupta & Dhingra, 2022) both in emerging markets and advanced economies, therefore future studies could analyse related shopping motivations from a cross-cultural point of view.

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## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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## REFERENCES

- Agrebi, S., & Jallais, J. (2015). Explain the intention to use smartphones for mobile shopping. *Journal of Retailing and Consumer Services*, 22, 16–23. <https://doi.org/10.1016/j.jretconser.2014.09.003>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Prentice-Hall Inc.
- Akram, U., Ansari, A. R., Fu, G., & Junaid, M. (2020). Feeling hungry? Let's order through mobile! Examining the fast-food mobile commerce in China. *Journal of Retailing and Consumer Services*, 56, 102142. <https://doi.org/10.1016/j.jretconser.2020.102142>
- AlNuaimi, B. K., Khan, M., & Ajmal, M. M. (2021). The role of big data analytics capabilities in greening e-procurement: A higher-order PLS-SEM analysis. *Technological Forecasting and Social Change*, 169, 120808. <https://doi.org/10.1016/j.techfore.2021.120808>
- Amblee, N., & Bui, T. (2008). Can brand reputation improve the odds of being reviewed online? *International Journal of Electronic Commerce*, 12(3), 11–28. <https://doi.org/10.2753/JEC1086-4415120302>
- Arya, V., Paul, J., & Sethi, D. (2021). Like it or not! Brand communication on social networking sites triggers consumer-based brand equity. *International Journal of Consumer Studies*, 1–18, 1381–1398. <https://doi.org/10.1111/ijcs.12763>
- Ashraf, A. R., Tek, N. T., Anwar, A., Lapa, L., & Venkatesh, V. (2021). Perceived values and motivations influencing m-commerce use: A nine-country comparative study. *International Journal of Information Management*, 59, 102318. <https://doi.org/10.1016/j.ijinfomgt.2021.102318>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. <https://doi.org/10.1007/BF02723327>
- Bazi, S., Filieri, R., & Gorton, M. (2020). Customers' motivation to engage with luxury brands on social media. *Journal of Business Research*, 112, 223–235. <https://doi.org/10.1016/j.jbusres.2020.02.032>
- Benitez, J., Henseler, J., Castillo, A., & Schuberth, F. (2020). How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Information & Management*, 57(2), 103168. <https://doi.org/10.1016/j.im.2019.05.003>
- Bian, Q., & Forsythe, S. (2012). Purchase intention for luxury brands: A cross-cultural comparison. *Journal of Business Research*, 65(10), 1443–1451. <https://doi.org/10.1016/j.jbusres.2011.10.010>
- Bilro, R. G., Loureiro, S. M. C., & dos Santos, J. F. (2021). Masstige strategies on social media: The influence on sentiments and attitude toward the brand. *International Journal of Consumer Studies*, 46, 1113–1126. <https://doi.org/10.1111/ijcs.12747>
- Blázquez, M. (2014). Fashion shopping in multichannel retail: The role of technology in enhancing the customer experience. *International Journal of Electronic Commerce*, 18(4), 97–116. <https://doi.org/10.1016/j.jbusres.2011.10.010>
- Bölen, M. C., Calisir, H., & Özen, Ü. (2021). Flow theory in the information systems life cycle: The state of the art and future research agenda. *International Journal of Consumer Studies*, 45, 546–580. <https://doi.org/10.1111/ijcs.12641>
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1(3), 185–216. <https://doi.org/10.1177/135910457000100301>
- Brown, T. J., Barry, T. E., Dacin, P. A., & Gunst, R. F. (2005). Spreading the word: Investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context. *Journal of the Academy of Marketing Science*, 33(2), 123–138. <https://doi.org/10.1177/0092070304268417>
- Bruner, G. C., II, & Kumar, A. (2005). Explaining consumer acceptance of handheld Internet devices. *Journal of Business Research*, 58(5), 553–558. <https://doi.org/10.1016/j.jbusres.2003.08.002>
- Cai, S., & Xu, Y. (2006). Effects of outcome, process and shopping enjoyment on online consumer behaviour. *Electronic Commerce Research and Applications*, 5(4), 272–281. <https://doi.org/10.1016/j.elelap.2006.04.004>
- Cavalinhos, S., Marques, S. H., & de Fátima Salgueiro, M. (2021). The use of mobile devices in-store and the effect on shopping experience: A systematic literature review and research agenda. *International Journal of Consumer Studies*, 45, 1198–1216. <https://doi.org/10.1111/ijcs.12690>
- Chen, H., Jin, Y., & Huo, B. (2020). Understanding logistics and distribution innovations in China. *International Journal of Physical Distribution & Logistics Management*, 50, 313–322. <https://doi.org/10.1108/IJPDLM-04-2020-403>
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77(4), 511–535. [https://doi.org/10.1016/S0022-4359\(01\)00056-2](https://doi.org/10.1016/S0022-4359(01)00056-2)
- Chong, A. Y. L. (2013a). A two-staged SEM-neural network approach for understanding and predicting the determinants of m-commerce adoption. *Expert Systems with Applications*, 40(4), 1240–1247. <https://doi.org/10.1016/j.eswa.2012.08.067>
- Chong, A. Y. L. (2013b). Mobile commerce usage activities: The roles of demographic and motivation variables. *Technological Forecasting and Social Change*, 80(7), 1350–1359. <https://doi.org/10.1016/j.techfore.2012.12.011>
- Chong, A. Y. L., Chan, F. T., & Ooi, K. B. (2012). Predicting consumer decisions to adopt mobile commerce: Cross country empirical examination between China and Malaysia. *Decision Support Systems*, 53(1), 34–43. <https://doi.org/10.1016/j.dss.2011.12.001>
- Chopdar, P. K., & Balakrishnan, J. (2020). Consumers' response towards mobile commerce applications: SOR approach. *International Journal of Information Management*, 53, 102106. <https://doi.org/10.1016/j.ijinfomgt.2020.102106>
- Chopdar, P. K., Korfiatis, N., Sivakumar, V. J., & Lytras, M. D. (2018). Mobile shopping apps adoption and perceived risks: A cross-country perspective utilizing the unified theory of acceptance and use of technology. *Computers in Human Behavior*, 86, 109–128. <https://doi.org/10.1016/j.chb.2018.04.017>
- Chopdar, P. K., Paul, J., & Prodanova, J. (2022). Mobile shoppers' response to COVID-19 phobia, pessimism and smartphone addiction: Does social influence matter? *Technological Forecasting and Social Change*, 174, 121249. <https://doi.org/10.1016/j.techfore.2021.121249>
- Chopdar, P. K., & Sivakumar, V. J. (2019). Understanding continuance usage of mobile shopping applications in India: The role of espoused

- cultural values and perceived risk. *Behaviour & Information Technology*, 38(1), 42–64. <https://doi.org/10.1080/0144929X.2018.1513563>
- Dash, G., & Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technological Forecasting and Social Change*, 173, 121092. <https://doi.org/10.1016/j.techfore.2021.121092>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Davis, R., Lang, B., & Gautam, N. (2013). Modeling utilitarian-hedonic dual mediation (UHDM) in the purchase and use of games. *Internet Research*, 23(2), 229–256. <https://doi.org/10.1108/10662241311313330/>
- DeCarlo, L. T. (1997). On the meaning and use of kurtosis. *Psychological Methods*, 2(3), 292–307. <https://doi.org/10.1037/1082-989X.2.3.292>
- Eppmann, R., Bekk, M., & Klein, K. (2018). Gameful experience in gamification: Construction and validation of a Gameful Experience Scale [GAMEX]. *Journal of Interactive Marketing*, 43, 98–115. <https://doi.org/10.1016/j.intmar.2018.03.002>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G\* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Filieri, R. (2015). What makes online reviews helpful? A diagnosticity-adoption framework to explain informational and normative influences in e-WOM. *Journal of Business Research*, 68(6), 1261–1270. <https://doi.org/10.1016/j.jbusres.2014.11.006>
- Filieri, R., Acikgoz, F., Ndou, V., & Dwivedi, Y. (2020). Is TripAdvisor still relevant? The influence of review credibility, review usefulness, and ease of use on consumers' continuance intention. *International Journal of Contemporary Hospitality Management*, 33(1), 199–223. <https://doi.org/10.1108/IJCHM-05-2020-0402>
- Filieri, R., & Lin, Z. (2017). The role of aesthetic, cultural, utilitarian and branding factors in young Chinese consumers' repurchase intention of smartphone brands. *Computers in Human Behavior*, 67, 139–150. <https://doi.org/10.1016/j.chb.2016.09.057>
- Filieri, R., McLeay, F., Tsui, B., & Lin, Z. (2018). Consumer perceptions of information helpfulness and determinants of purchase intention in online consumer reviews of services. *Information & Management*, 55(8), 956–970. <https://doi.org/10.1016/j.im.2018.04.010>
- Flavián, C., Guinalíu, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information and Management*, 43(1), 1–14. <https://doi.org/10.1016/j.im.2005.01.002>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Gao, L., Waechter, K. A., & Bai, X. (2015). Understanding consumers' continuance intention towards mobile purchase: A theoretical framework and empirical study—A case of China. *Computers in Human Behavior*, 53, 249–262. <https://doi.org/10.1016/j.chb.2015.07.014>
- Gaskin, J., Godfrey, S., & Vance, A. (2018). Successful system use: It's not just who you are, but what you do. *AIS Transactions on Human-Computer Interaction*, 10(2), 57–81. <https://doi.org/10.17705/1thci.00104>
- Gupta, S., & Dhingra, S. (2022). Past, present, and future of mobile financial services: A critique, review and future agenda. *International Journal of Consumer Studies*. <https://doi.org/10.1111/ijcs.12855>
- Guthrie, C., Fosso-Wamba, S., & Arnaud, J. B. (2021). Online consumer resilience during a pandemic: An exploratory study of e-commerce behavior before, during and after a COVID-19 lockdown. *Journal of Retailing and Consumer Services*, 61, 102570. <https://doi.org/10.1016/j.jretconser.2021.102570>
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442–458. <https://doi.org/10.1108/IMDS-04-2016-0130>
- Hair, J. F., Anderson, R. E., Babin, B. J., & Black, W. C. (2010). *Multivariate data analysis: A global perspective* (Vol. 7). Pearson.
- Hellier, P. K., Geursen, G. M., Carr, R. A., & Rickard, J. A. (2003). Customer repurchase intention. *European Journal of Marketing*, 37(11/12), 1762–1800. <https://doi.org/10.1108/03090560310495456/full/html>
- Henseler, J. (2017). Partial least squares path modeling. In P. Leeflang, J. Wieringa, T. Bijmolt, & K. Pauwels (Eds.), *Advanced methods for modeling markets. International series in quantitative marketing* (pp. 361–381). Springer.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *New challenges to international marketing (advances in international marketing)* (Vol. 20, pp. 277–319). Emerald Group Publishing Limited.
- Hentzen, J. K., Hoffmann, A. O., & Dolan, R. M. (2021). Which consumers are more likely to adopt a retirement app, and how does it explain mobile technology-enabled retirement engagement? *International Journal of Consumer Studies*, 46, 368–390. <https://doi.org/10.1111/ijcs.12685>
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92–101.
- Hofacker, C. F., De Ruyter, K., Lurie, N. H., Manchanda, P., & Donaldson, J. (2016). Gamification and mobile marketing effectiveness. *Journal of Interactive Marketing*, 34, 25–36. <https://doi.org/10.1016/j.intmar.2016.03.001>
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Sage.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind: Intercultural cooperation and its importance for survival*. McGraw-Hill.
- Hu, L. (2020). *International digital marketing in China. Regional characteristics and global challenges*. Palgrave Macmillan.
- Hu, Y., & Kim, H. J. (2018). Positive and negative eWOM motivations and hotel customers' eWOM behavior: Does personality matter? *International Journal of Hospitality Management*, 75, 27–37. <https://doi.org/10.1016/j.ijhm.2018.03.004>
- Jebbarakirithy, C., Maseeh, H. I., Morshed, Z., Shankar, A., Arli, D., & Pentecost, R. (2021). Mobile advertising: A systematic literature review and future research agenda. *International Journal of Consumer Studies*, 45, 1258–1291. <https://doi.org/10.1111/ijcs.12728>
- Khalifa, M., & Liu, V. (2007). Online consumer retention: Contingent effects of online shopping habit and online shopping experience. *European Journal of Information Systems*, 16(6), 780–792. <https://doi.org/10.1057/palgrave.ejis.3000711>
- Khammash, M., & Griffiths, G. H. (2011). 'Arrivederci CIAO.com, Buongiorno Bing.com'—Electronic word-of-mouth (eWOM), antecedences and consequences. *International Journal of Information Management*, 31(1), 82–87. <https://doi.org/10.1016/j.ijinfomgt.2010.10.005>
- Kim, C., Galliers, R. D., Shin, N., Ryoo, J. H., & Kim, J. (2012). Factors influencing Internet shopping value and customer repurchase intention. *Electronic Commerce Research and Applications*, 11(4), 374–387. <https://doi.org/10.1016/j.elerap.2012.04.002>
- Ko, E., Kim, E. Y., & Lee, E. K. (2009). Modeling consumer adoption of mobile shopping for fashion products in Korea. *Psychology and Marketing*, 26(7), 669–687. <https://doi.org/10.1002/mar.20294>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (IJEC)*, 11(4), 1–10. <https://doi.org/10.4018/ijec.2015100101>
- 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. <https://doi.org/10.1016/j.jretconser.2020.102399>

- Lei, S., & Law, R. (2019). Functionality evaluation of mobile hotel websites in the m-commerce era. *Journal of Travel & Tourism Marketing*, 36(6), 665–678. <https://doi.org/10.1080/10548408.2019.1624240>
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96. <https://doi.org/10.1509/jm.15.0420>
- Li, Y., & Yeh, Y. (2010). Increasing trust in mobile commerce through design aesthetics. *Computers in Human Behavior*, 26(4), 673–684. <https://doi.org/10.1016/j.chb.2010.01.004>
- Lin, C. P., & Bhattacharjee, A. (2010). Extending technology usage models to interactive hedonic technologies: A theoretical model and empirical test. *Information Systems Journal*, 20(2), 163–181. <https://doi.org/10.1111/j.1365-2575.2007.00265.x>
- Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. *IEEE Transactions on Professional Communication*, 57(2), 123–146. <https://doi.org/10.1109/TPC.2014.2312452>
- Lowry, P. B., Gaskin, J., Twyman, N., Hammer, B., & Roberts, T. (2012). Taking 'fun and games' seriously: Proposing the hedonic-motivation system adoption model (HMSAM). *Journal of the Association for Information Systems*, 14(11), 617–671. <https://doi.org/10.17705/1jais.00347>
- Lu, J., Yu, C. S., Liu, C., & Wei, J. (2017). Comparison of mobile shopping continuance intention between China and USA from an espoused cultural perspective. *Computers in Human Behavior*, 75, 130–146. <https://doi.org/10.1016/j.chb.2017.05.002>
- Mardia, K. V. (1970). Measures of multivariate skewness and kurtosis with applications. *Biometrika*, 57(3), 519–530. <https://doi.org/10.1093/biomet/57.3.519>
- Marinao-Artigas, E., & Barajas-Portas, K. (2020). Precedents of the satisfaction of mobile shoppers. A cross-country analysis. *Electronic Commerce Research and Applications*, 39, 100919. <https://doi.org/10.1016/j.eleap.2019.100919>
- McLean, G., Al-Nabhani, K., & Wilson, A. (2018). Developing a mobile applications customer experience model (MACE)—Implications for retailers. *Journal of Business Research*, 85, 325–336. <https://doi.org/10.1016/j.jbusres.2018.01.018>
- McLean, G., Osei-Frimpong, K., Al-Nabhani, K., & Marriott, H. (2020). Examining consumer attitudes towards retailers' m-commerce mobile applications—An initial adoption vs. continuous use perspective. *Journal of Business Research*, 106, 139–157. <https://doi.org/10.1016/j.jbusres.2019.08.032>
- Meola, A. (2022). Rise of Mcommerce: Mobile ecommerce shopping stats & trends in 2022. *Business Insider*. Retrieved from <https://www.businessinsider.com/mobile-commerce-shopping-trends-stats?US&IR=T>
- Min, Q., Ji, S., & Qu, G. (2008). Mobile commerce user acceptance study in China: A revised UTAUT model. *Tsinghua Science and Technology*, 13(3), 257–264. [https://doi.org/10.1016/S1007-0214\(08\)70042-7](https://doi.org/10.1016/S1007-0214(08)70042-7)
- Mishra, R., Singh, R. K., & Koles, B. (2021). Consumer decision-making in Omnichannel retailing: Literature review and future research agenda. *International Journal of Consumer Studies*, 45(2), 147–174. <https://doi.org/10.1111/ijcs.12617>
- Morgan, J. P. (2020). 2020 E-commerce Payments Trends Report: China. Retrieved from <https://www.jpmorgan.com/merchant-services/insights/reports/china-2020>
- Natarajan, T., Balasubramanian, S. A., & Kasilingam, D. L. (2017). Understanding the intention to use mobile shopping applications and its influence on price sensitivity. *Journal of Retailing and Consumer Services*, 37, 8–22. <https://doi.org/10.1016/j.jretconser.2017.02.010>
- Nunnally, J. C. (1967). *Psychometric theory*. McGraw-Hill.
- Nysveen, H., Pedersen, P. E., & Thorbjørnsen, H. (2005). Explaining intention to use mobile chat services: Moderating effects of gender. *Journal of Consumer Marketing*, 22(5), 247–256. <https://doi.org/10.1108/07363760510611671>
- OECD. (2020). *OECD Policy Responses to Coronavirus (COVID-19) E-commerce in the time of COVID-19*. Retrieved from <https://www.oecd.org/coronavirus/policy-responses/e-commerce-in-the-time-of-covid-19-3a2b78e8/>
- Ogbeibu, S., Senadji, A., & Gaskin, J. (2018). The moderating effect of benevolence on the impact of organizational culture on employee creativity. *Journal of Business Research*, 90, 334–346. <https://doi.org/10.1016/j.jbusres.2018.05.032>
- Paul, J., & Bhukya, R. (2021). Forty-five years of international journal of consumer studies: A bibliometric review and directions for future research. *International Journal of Consumer Studies*, 45(5), 937–963. <https://doi.org/10.1111/ijcs.12727>
- Pentina, I., Zhang, L., Bata, H., & Chen, Y. (2016). Exploring privacy paradox in information-sensitive mobile app adoption: A cross-cultural comparison. *Computers in Human Behavior*, 65, 409–419. <https://doi.org/10.1016/j.chb.2016.09.005>
- Pratesi, F., Hu, L., Rialti, R., Zollo, L., & Faraoni, M. (2021). Cultural dimensions in online purchase behavior: Evidence from a cross-cultural study. *Italian Journal of Marketing*, 2021(3), 227–247. <https://doi.org/10.1007/s43039-021-00022-z>
- Rasoolimanesh, S. M., & Ali, F. (2018). Guest editorial. *Journal of Hospitality and Tourism Technology*, 9(3), 238–248. <https://doi.org/10.1108/JHTT-10-2018-142>
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332–344. <https://doi.org/10.1016/j.ijresmar.2009.08.001>
- Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: A critical look at the use of PLS-SEM in "MIS quarterly". *MIS Quarterly*, 36(1), iii–xiv. <https://doi.org/10.2307/41410402>
- Rose, S., Clark, M., Samouel, P., & Hair, N. (2012). Online customer experience in e-retailing: An empirical model of antecedents and outcomes. *Journal of Retailing*, 88(2), 308–322. <https://doi.org/10.1016/j.jretai.2012.03.001>
- Rouibah, K., Al-Qirim, N., Hwang, Y., & Pouri, S. G. (2021). The determinants of eWoM in social commerce: The role of perceived value, perceived enjoyment, trust, risks, and satisfaction. *Journal of Global Information Management (JGIM)*, 29(3), 75–102. <https://doi.org/10.4018/JGIM.2021050104>
- Santos, S., & Gonçalves, H. M. (2019). Multichannel consumer behaviors in the mobile environment: Using fsQCA and discriminant analysis to understand webrooming motivations. *Journal of Business Research*, 101, 757–766. <https://doi.org/10.1016/j.jbusres.2018.12.069>
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F., Jr. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105–115. <https://doi.org/10.1016/j.jfbs.2014.01.002>
- Shankar, V., Inman, J. J., Mantrala, M., Kelley, E., & Rizley, R. (2011). Innovations in shopper marketing: Current insights and future research issues. *Journal of Retailing*, 87(1), S29–S42. <https://doi.org/10.1016/j.jretai.2011.04.007>
- Sharma, A., Dwivedi, Y. K., Arya, V., & Siddiqui, M. Q. (2021). Does SMS advertising still have relevance to increase consumer purchase intention? A hybrid PLS-SEM-neural network modelling approach. *Computers in Human Behavior*, 124, 106919. <https://doi.org/10.1016/j.chb.2021.106919>
- Shin, J., Chae, H., & Ko, E. (2018). The power of eWOM using the hashtag: Focusing on SNS advertising of SPA brands. *International Journal of Advertising*, 37(1), 71–85. <https://doi.org/10.1080/02650487.2017.1401519>
- Singh, S., & Swait, J. (2017). Channels for search and purchase: Does mobile Internet matter? *Journal of Retailing and Consumer Services*, 39, 123–134. <https://doi.org/10.1016/j.jretconser.2017.05.014>
- Smith, R., Deitz, G., Royné, M. B., Hansen, J. D., Grünhagen, M., & Witte, C. (2013). Cross-cultural examination of online shopping behavior: A comparison of Norway, Germany, and the United States. *Journal of Business Research*, 66(3), 328–335. <https://doi.org/10.1016/j.jbusres.2011.08.013>

- Soto-Acosta, P. (2020). COVID-19 pandemic: Shifting digital transformation to a high-speed gear. *Information Systems Management*, 37(4), 260–266. <https://doi.org/10.1080/10580530.2020.1814461>
- Statista. (2021). *Mobile commerce in Italy – Statistics & facts*. Retrieved from <https://www.statista.com/topics/6924/mobile-commerce-in-italy/>
- Statista. (2022). *eCommerce*. Retrieved from <https://www.statista.com/outlook/dmo/ecommerce/worldwide#revenue>
- Su, J., & Tong, X. (2020). An empirical study on Chinese adolescents' fashion involvement. *International Journal of Consumer Studies*, 44(3), 232–242. <https://doi.org/10.1111/ijcs.12564>
- Sun, Q., & Xu, B. (2019). Mobile social commerce: Current state and future directions. *Journal of Global Marketing*, 32(5), 306–318. <https://doi.org/10.1080/08911762.2019.1620902>
- Tang, A. K. (2019). A systematic literature review and analysis on mobile apps in m-commerce: Implications for future research. *Electronic Commerce Research and Applications*, 37, 100885. <https://doi.org/10.1016/j.elerap.2019.100885>
- Thien, L. M. (2020). Assessing a second-order quality of school life construct using partial least squares structural equation modelling approach. *International Journal of Research and Method in Education*, 43(3), 243–256. <https://doi.org/10.1080/1743727X.2019.1662779>
- Thongpapanl, N., Ashraf, A. R., Lapa, L., & Venkatesh, V. (2018). Differential effects of customers' regulatory fit on trust, perceived value, and m-commerce use among developing and developed countries. *Journal of International Marketing*, 26(3), 22–44. <https://doi.org/10.1509/jim.17.0129>
- Van der Heijden, H. (2004). User acceptance of hedonic information systems. *MIS Quarterly*, 28(4), 695–704.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Wang, R. J. H., Malthouse, E. C., & Krishnamurthi, L. (2015). On the go: How mobile shopping affects customer purchase behavior. *Journal of Retailing*, 91, 217–234. <https://doi.org/10.1016/j.jretai.2015.01.002>
- Zhang, L., Han, Y., & Wang, L. (2011). Information availability on Chinese apparel B2C websites. *International Journal of Consumer Studies*, 35(4), 420–429. <https://doi.org/10.1111/j.1470-6431.2010.00947.x>
- Zhang, L., Zhu, J., & Liu, Q. (2012). A meta-analysis of mobile commerce adoption and the moderating effect of culture. *Computers in Human Behavior*, 28(5), 1902–1911. <https://doi.org/10.1016/j.chb.2012.05.008>
- Zhang, Z., & Yuan, K. H. (2018). *Practical statistical power analysis using Webpower and R*. ISDSA Press.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206.
- Zheng, X., Men, J., Yang, F., & Gong, X. (2019). Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing. *International Journal of Information Management*, 48, 151–160. <https://doi.org/10.1016/j.ijinfomgt.2019.02.010>

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