



## ONLINE PURCHASE INTENTION: THE ROLE OF CULTURE

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### ABSTRACT

The purpose of this study is to understand the role of culture in online purchase intentions. Although studies have recognized and provided compelling arguments that culture is an important determinant of consumers' intention to purchase online, the current literature is clear that the theoretical foundation of culture is limited; few have investigated the role of culture in the online purchase context. Based on review of relevant literature, this article finds that culture plays a significant role in an online purchasing context and affects the behavior of social network users and their intention to purchase on social commerce sites. Understanding the role of culture in the online context will provide researchers with a comprehensive tool to analyze the interaction between web and e-commerce characteristics and cultural characteristics, and provide practitioners with different approaches to succeed in different countries.

## 1. Introduction

### 1.1 Online purchase intention

With the rapidly growing competitive business environment and online business, attracting consumers to buy online is just the first step toward success; continued purchase intention is another challenge. At present, the marketplace has become globally connected, and understanding what influences online purchase intention of products has evolved as a research of much importance. Therefore, studies have been conducted in different regions of the world with the intention of understanding what actually affects consumers' online purchase intention of products (Haque, Rahman, & Haque, 2011; Mostafa, 2010).

Researchers have used different theories to understand factors that actually influence consumers' online purchase intention. The most frequently used theory related to attitude and purchase intention is the theory of planned behavior (TPB). According to this theory, consumers' online behavior is predictable from their intention, and their intention will be influenced by attitude toward online purchase. Indeed, consumers are most likely to form many different judgments when they view commercials or evaluate online products and services. These judgments eventually will turn into attitude that consumers form toward the product or service, resulting in their purchase behavior. Thus, according to the TBP, three distinct concepts determine behavioral intentions, i.e., attitude towards the behavior, subjective norm and perceived behavioral control (Ajzen 1991).

Purchase intention is "the consumers' willingness to make a purchase through the website in the future" (Wu et al., 2017, p. 694). It has been argued that the greater the individual's behavioral intention, the stronger the will of the person to perform the behavior (Ajzen 1991). Literature has recognized and provided compelling arguments about factors that are important determinants for consumers' intention to online purchase. It has been argued that some determinants would lead to enhancing individual response, followed by the continued intention to purchase. Although researchers have used many different theories to explore the factors that influence online purchase adoption, the number of studies to understand drivers of consumers' online behavior is still rather limited (Hsiao and Chen, 2018; Saeed, Bekhet and Dhar, 2018).

### *1.2 Culture*

In 1983, Levitt presented his proposition about globalization of markets. Since that time, the idea of a homogenized world market has dominated scholars' discussions (Moon et al., 2008). The idea is about the growing number of consumers from diverse geographic locations and different cultural backgrounds tending to share the same preferences, which facilitated the emergence of global brands with relatively standardized marketing strategies across cultural boundaries (Zou and Cavusgil, 1996). However, some scholars have reported evidence about increasing divergence, especially among developed countries (Usunier, 1997). For instance, in Europe, cultural values appear to be stable over time, due to the economic union and progress toward standardization of their political and social infrastructure (De Mooij, 2000). Some scholars have reported that consumers, even after much exposure to globalization, remain reluctant to buy foreign products, because consumers from different cultures have different attitudes and preferences (Suh and Kwon, 2002); in addition, cultural differences and persuasion influence attitudes (Aaker, 2000); acceptance of new products (Takada and Jain, 1991); and usage of new products and services (Zaichkowsky and Sood, 1989). All of this have led to scholars calling to examine intentions to purchase online, by considering the cultural contexts in different countries (Oliver and Lee, 2010).

National culture refers to a set of beliefs and behavior shared by a group of people (Hofstede, 1980). Culture is defined as "the collective programming of the mind distinguishing members of one group from another" (Hofstede, 2011, p.3). It has been argued that culture is "a factor that emphasizes the multiple differences in the structure and behavior of the market" (Wang et al., 2017, p. 34). Current literature has contradictory results about determinants of online purchase intention. These inconsistent findings may be due to the differences in cultural contexts (Ng, 2013). As different countries have varying inherent values and cultures, consumers' behavior and their intention to purchase from online sites may not be the same. For example, the behavior of consumers in the West may not be applicable to all cultures. Culture might be an obstacle to online marketing (Wu et al., 2017). Thus, culture is an important dimension to explain consumers' behavior (Sreen et al., 2018).

In 1980, Hofstede presented his seminal work about cultural dimensions. In this work, Hofstede presented his framework on cultural dimensions. He proposed that national cultures vary along five dimensions, namely individualism (IDV) versus collectivism (COL), uncertainty avoidance (UAI), power distance (PD), masculinity (MAS) and long-term orientation (LTO) (Hofstede, 2001). IDV versus COL refers to the relationships of individuals within a culture (Hofstede, 1980). IDV is the extent to which the ties between individuals are loose (Ng, 2013), whereas COL refers to collectivistic cultures by group achievements and group loyalty (Capece et al., 2013). The UAI index measures the degree to which people avoid uncertain situations (Capece et al., 2013). Uncertainty about trustworthiness of an online store is one of the main reasons individuals become reluctant to involve themselves in e-commerce (Hallikainen and Laukkanen, 2018). With a high UAI in a society, individuals tend to apply more formal rules and do not tolerate new ideas (Moon et al., 2008). The power distance index (PDI) represents the level of social acceptance of power asymmetry (Capece et al., 2013). PD

explains how a society deals with inequality among its members. Hofstede (2010) described PD as the extent to which less powerful members expect and accept an unequal distribution of power between them. In the PD culture dimension, customers tolerate failure better and do not expect a great deal of reliability from their business partners (Hallikainen and Laukkanen, 2018). MAS versus femininity represents cultures characterized by challenges and social achievements, where a feminine culture is represented by quality of life, environmental care, security and attention to others (Capece et al., 2013). Hofstede (1980) defined MAS as the degree to which a society values assertiveness, achievement and the acquisition of wealth. In masculine cultures, caring for others and improving the overall quality of life are less important than achievement and success. LTO is about orientation towards future rewards, perseverance and thrift; on the contrary, short-term orientation is about respect for tradition and for social obligations (Capece et al., 2013). Business relationships are typically built on the basis of trust and long-lasting relationship with the business partner, which is an important factor of a business relationship (Hallikainen and Laukkanen, 2018).

Hafstrom et al. (1992) found differences in decision-making between young people from Korea and the USA. Furthermore, some scholars have found that culture influences perceptions of websites (Mazaheri, Richard, & Laroche, 2011); and that consumers from different cultures have different preferences for online tools (Seidenspinner & Theuner, 2007). Hofstede's (2001) cultural framework has been used by numerous researchers as a theoretical foundation of consumer behavior research. Hofstede's theory "provides researchers with a comprehensive and well-developed tool with which to potentially analyze the interaction between the web and e-commerce characteristics and cultural characteristics" (Capece et al., 2013). Therefore, it is relevant to examine intentions to purchase in the online context for different countries using a cultural framework (Oliver and Lee, 2010).

Although literature has recognized and provided compelling arguments that culture is an important determinant of consumers' intention to purchase online, it has been scarcely used in previous studies to explain consumers' purchase behavior mostly in the developing market (Sreen et al., 2018). Most of the research on the effect of cultural factors has been conducted in Western countries (Hallikainen and Laukkanen, 2018). These studies are fragmented and do not explain how different cultures affect purchase intentions on social shopping sites in the emerging markets in different countries (Sreen et al., 2018). Despite calls for more interest on the cultural aspect studies, few researchers have investigated the role of culture in online retailing (Richard and Habibi, 2016; Capece et al., 2013). Thus, there is a need to have more studies on the role of culture in consumers' attitude and purchase intention. Without addressing this issue, it is questionable whether or not the literature provides consistent findings, due to the differences in cultural and national contexts. In particular, the behavior of consumers in the East may not be applied to cultures in the West. Different countries have varying inherent values, symbols and cultures; thus, the behavior of social network users and their intention to purchase on social commerce sites may not be the same (See and Ng, 2013). It has been argued that an enhanced understanding of the role of culture in influencing purchase intentions in the context of online shopping will help to explain the interaction effect of consumers' attitude and their culture on purchase intentions on social shopping sites. In sum, understanding this issue will contribute to the generalizability of some of the key factors underpinning online purchase intention research.

The aim of this study is to understand the role of culture in online purchase intention. The remaining sections of this research are organized as follows: section 2 reviews the theory of planned behavior (TPB); Section 3 provides a literature review on the relationship between culture and online purchase intention; section 4 analyses the role of culture in consumers' online purchase intention and section 5 is the conclusion which includes future research directions.

## **2. Theory of Planned Behavior (TPB)**

The Theory of Planned Behavior (TPB) was developed as an extension to the theory of reasoned action, with a central focus on individuals' intention to perform a given behavior (Tarkiainen and Sundqvist 2005). The TPB was formulated to predict individual behavior in which individuals have incomplete volitional control (Ajzen and Fishbein, 1988). The TPB thus emphasizes on individual factors that motivate and determine the likelihood of performing a specific behavior (Montano and Kasprzyk, 2008). Based on the theoretical underpinning of the TBP, determining of individuals behavioral intention is the base for the occurrence of behavior; thus, behavioral intention is the motivational factor that influences the subsequent behavior (Ajzen 1991). Behavioral intentions accordingly are indicators of willing efforts of individuals to perform the behavior. Under this proposition, three distinct concepts determine behavioral intentions, i.e., attitude towards the behavior, subjective norm and perceived behavioral control. According to the TPB, behavioral intention is a determinant of the individual's behavior; while behavioral intention is determined by attitude toward the behavior, subjective norm and perceived behavioral control (Tang et al., 2011). Building on the TBP, Pavlou (2003) argued that purchase intention is more appropriate to measure intention to use a website when assessing online consumer behavior. This is because behavioral intention is the most influential predictor of the subsequent actual behavior (Lu et al., 2016). Ajzen (1991) defined individual attitude toward behavior as the degree to which an individual has a favorable or unfavorable evaluation of the behavior (Ajzen 1991). The more favorable the attitude to the behavior in question, the greater is the individual's intention to perform that behavior. In the same vein, subjective norm is the perceived social pressure to perform or not to perform the behavior (Ajzen 1991); while perceived behavioral control is the perceived ease or difficulty of performing the behavior that reflects the individual's experiences and perceived barriers. Accordingly, the more favorable the attitude and subjective norm towards the behavior in question, the greater the perceived behavioral control and the stronger the intention of a person to perform the behavior (Ajzen 1991).

According to the TPB, it has been argued that consumers' beliefs and attitude will influence their intentions toward online shopping. Attitudes explain consumers' loyalty and their continuance intention; higher positive attitude is directly related to consumers' online purchase decisions; conversely, negative attitudes will lead consumers to avoid any purchase (Amoroso and Lim, 2017).

Similarly, perceived behavioral control has a strong effect on behavior intention. When individuals perceive that they have control on an uncertain environmental event, this will help to reduce their perception of risk and uncertainty, thus significantly influencing their perceptions of risk, stress and satisfaction (Li et al., 2018, Kim and Chung, 2011). Thus, as much as consumers perceive they can control their purchase decisions, the behavioral intention will also increase (Kim and Chung, 2011). Therefore, if online retailers make efforts to enhance consumers' perceived control in the online purchase context, it is likely that more and more consumers will make a decision to purchase online (Li et al., 2018).

The TPB also argues that subjective norm is a strong determinant of behavior intention. Elseidi (2018) found that subjective norm is the most influential variable in purchase intention. Subjective norm is concerned with the likelihood that an individual or groups approve or disapprove performing a specific behavior, by considering the expectations of friends, peers and other family members, and their motivation to comply with these expectations (Ajzen, 1991, 2002). If an individual believes that their referents agree to the performing of the behavior, then the individual will be more likely to perform this behavior. Thus, subjective norm influences individuals' intention to perform the behavior (Elseidi, 2018). The TPB has been successfully applied to various situations in order to predict the performance of behavior and intentions, such as predicting intention for in-app purchase (Hsu and Lin, 2016); luxury brand purchase (Marticotte and Arcand, 2017); online shopping (Lim et al., 2016); and e-learning acceptance (Yatigamma and Johar, 2013). The TBP provides a framework to evaluate attitude toward behavior (Ajzen and Fishbein 1988). According to the TBP, behavior intent is

the most important determinant of individual behavior (Ajzen and Fishbein 1988). This individual intention toward performing the behavior is a combination of attitude toward the behavior and subjective norm. Individual attitude toward the behavior includes: behavioral belief; evaluations of behavioral outcome; subjective norm; normative beliefs; and the motivation to perform (Ajzen and Fishbein 1988). It has been argued that if individuals perceive positive outcomes from performing specific behavior, then they will have a positive attitude toward performing the behavior in question; while perceiving negative outcomes will lead to negative attitude toward the behavior (Ajzen and Fishbein 1988). Similarly, if relevant others see performing the behavior as positive and the individual is considered as meeting the expectations of others, then, a positive subjective norm is expected and vice versa. Therefore, the intention to perform a behavior depends on the evaluation of the attitude and subjective norm; a positive evaluation indicates positive behavioral intent (Ajzen and Fishbein 1988). Although the TBP concepts, i.e., attitude, subjective norm, perceived behavioral control and behavioral intention, all reveal different aspects of behavior, there are several limitations of the TPB: (i) it assumes the individual has acquired the opportunities and resources to be successful in performing the desired behavior; (ii) it does not account for/consider other variables that factor into behavioral intention and motivation, such as fear, threat, mood, culture and environmental and economic factors; (iii) it does not consider that behavior can change over time; and (iv) the time frame between 'intent' and 'behavioral action' is not considered by the theory (Ajzen 2006).

### **3. Literature Review**

Suh and Kwon (2002) mentioned that even after globalization, consumers from different cultures have different attitudes and remain reluctant toward foreign products. Thus, cultural differences affect consumer behavior and attitude (Aaker, 2000). Accordingly, discussions on the cultural aspect have increased since the early 21<sup>st</sup> century. This increase may have resulted from the need for studying impact of cultural values on purchase intention in different markets (Sreen et al., 2018); and to explain how different cultures affect purchase intentions on social shopping sites (Hsu et al., 2017). Table 1 summarizes previous studies related to culture and online purchase intention. This article reviews some of these studies below.

Using comparative studies or cross-regional studies, some scholars have studied the effects of cultural dimensions on purchase intention in different countries (e.g., Hallikainen and Laukkanen, 2018; Ng, 2013; An and Kim, 2008; Greenberg et al., 2008). Hallikainen and Laukkanen (2018), based on a comparative study on university students from China and Finland, investigated how cultural dimensions can explain variance in consumer trust in e-commerce. Considering that China and Finland are countries that represent opposite cultural poles in many respects, they found that culture explains just 23% of the variance in the consumers' trust, and trust is a significant predictor of the perceived trustworthiness of an online store. Ng (2013) developed an experimental social commerce site on Facebook. Based on a survey on respondents from Latin America and East Asia, they investigated culture as a moderating variable and trust as a mediating variable on the relationship between social interactions and purchase intention in a social network community. In this study, they found that culture moderates the relationship between social interactions and purchase intention and trust mediates the relationship between social interactions and purchase. Further, the mediating effect of trust is conditional on culture and the closeness and familiarity resulting from social interactions increase the level of trust. An and Kim (2008), based on a survey on respondents from the USA and Korea, investigated the impact of cultural values on consumer trust in the online shopping context. In this study, they found that the individualism-collectivism dimension has indirect effects on online trust; this dimension interacts significantly with the perceptions of technical competency of online shopping systems. In addition, online trust is not only based on the attributes system-related factors but also on interactions with the underlying cultural norms. Greenberg et al. (2008), based on survey on undergraduate students from Hong Kong and the USA,

compared Hong Kong and USA consumers' trust in online businesses to investigate whether trust and trust formation differ across cultures. In this study, they found that significant differences exist between consumers from Hong Kong and the USA regarding the perceived level of online risks and the formation of trust. Thus, these findings reiterate and underscore the importance of including national culture in studies on trust in e-commerce.

'Table 1'

Another stream of research has focused on understanding how specific dimensions of culture influence purchase intention in the online context (e.g., Sreen et al., 2018; Wang et al., 2017; Capece et al., 2013; Yoon, 2009; Moon et al., 2008). Yoon (2009), for instance, based on data collected from China, examined the moderating effect of culture dimensions, i.e., PD, IDV, UAI and LTO and their relationship to consumers' purchase intention. In this study, he found that LTO and UAI have a moderating effect on the relationship between trust and consumers' purchase intention; while PD and IDV have no effect on the relationship. Capece et al. (2013) replicated the study in Italy; they found that PD and IDV have a moderating influence on the relationship between trust and online purchase intention. Sreen et al. (2018), based on an online survey on a group of educated urban consumers in India, examined the influence of individual behavior on green purchase intention by applying the TPB; they found that culture dimensions, i.e., COL and LTO are significantly related to attitude as predictors of purchase intention, while the man-nature orientation dimension is significantly and directly related to purchase intention of green products. Wang et al. (2017), based on field experiments of young people in Hangzhou, analyzed the influence of different emotional green appeals on consumers' attitude towards the advertisement, perceived value and purchase intention. In this study, they found that attitude and perceived value have a significantly mediating effect on the relationship between emotional green appeals and purchase intention. Furthermore, the Confucian culture does not qualify as a moderator in this relationship. Moon et al. (2008), based on a survey on undergraduate and graduate students in a New Zealand university, found that IDV is the only culture dimension to have a significant effect on purchase intention.

Current literature shows that cultural dimensions matter for online purchase intentions (Sreen et al., 2018; Hallikainen and Laukkanen, 2018; Wang et al., 2017; Capece et al., 2013; Ng, 2013; An and Kim, 2008; Greenberg et al., 2008; Moon et al., 2008). However: (i) although, there is agreement about the importance of culture in online purchase intention, and there have been some efforts to investigate the relationship, little is known about the contribution of culture dimensions to online purchase intention, and how different cultures affect purchase intentions on social shopping sites to produce a better understanding of in-app purchase intention (Hsu et al., 2017; Marticotte and Arcand, 2017; Lu et al., 2017; Hsu and Lin, 2016); (ii) most of the current research has focused on investigating the relationship between cultural values and purchase intention in the developed countries' markets; current literature has scant information on the impact of cultural values on purchase intention in other markets (Sreen et al., 2018; Ng, 2013); and (iii) the role of culture in enhancing the relationship between attitude and consumers' online purchase intention has received less attention in the literature; in other words, very few studies have examined the key factors of consumers' online purchase from a cross-cultural perspective. Thus, there is a need to further investigate the role of culture in attitude and consumers' online purchase under different cultural settings and different national economic environments, such as in developing countries (Ng, 2103).

#### **4. The Role of Culture in Purchase Intention**

Culture, a complex and multifaceted phenomenon, consists of a set of beliefs and behaviors shared by a group of people; it may influence consumers' behavior differently in different countries (Hallikainen and Laukkanen, 2018). This is because culture is a factor that emphasizes the multiple differences in the structure and behavior of the market (Wang et al., 2018), and plays a significant role in an online purchasing context (Wu et al., 2018). Culture also affects the behavior

of social network users and their intention to purchase on social commerce sites (See and Ng, 2013). Some researchers have mentioned that culture influences perceptions of websites, and those consumers from different cultures have different preferences for online tools (Richard and Habibi, 2016). Previous studies have considered that culture is an important dimension (Sreen et al., 2018) and a significant differentiator (Richard and Habibi, 2017) to explain consumer behavior in the online purchase context (Sreen et al., 2018). Understanding how culture influences the intentions to purchase online is important because cultural differences are most likely to influence the way consumers respond to marketing efforts. Thus, it is important to study cultural contexts across countries to better understand consumer online behavior (Oliver and Lee, 2010). Consumers' behavior and their intention to purchase from online sites may not be the same due to varying inherent values and cultures between countries. For example, the behavior of consumers in the West may not be applicable to all cultures. This suggests that culture might be an obstacle to online marketing (Wu et al., 2017). Therefore, culture is an essential dimension to explain consumers' online behavior (Sreen et al., 2018).

Hofstede's dimensions have been extensively used to understand the purchase intention of consumers across cultures. Hofstede's theory includes five dimensions, namely PD, IDV versus COL, UAI, MAS and LTO (Hofstede, 2001). Amongst these five dimensions, Sreen et al. (2018) mentioned that COL and LTO are the most accepted dimensions for determining purchase intention; while, Ng (2013) suggested that IDV and UAI are the most relevant dimensions for determining purchase intention in the context of e-commerce.

It has been argued that in a collectivistic society, people hold group values and seek collective interests. COL, in this case, acts as a cushion against possible losses, suggesting that group diffusion leads to less risk perception (An and Kim, 2008, Greenberg et al., 2008). Thus, many scholars believe that COL is an effective way to influence consumers' values, attitude and their behavioral intention (Oliver and Lee, 2010). Similarly, people with LTO have a positive attitude towards the future, and a tendency to seek opinions from others before making any purchase decision if they are not sure about future benefits. Thus, LTO plays an important role to enhance individuals attitude and to determine individuals' purchase intention. However, it has been argued that uncertainty about trustworthiness of an online store is one of the main reasons individuals have reluctant 'attitude' to involve themselves in e-commerce (Hallikainen and Laukkanen, 2018). Accordingly, some scholars have suggested considering the moderating role of culture in the online purchasing context (Wu et al., 2017). They argued that investigating the influence of culture dimensions, such as COL or LTO, could deepen understanding and explain better the online purchase intention (Marticotte and Arcand, 2017, Lu et al., 2017, Hsu and Lin, 2016). Further, there is a need to study the impact of cultural values on purchase intention for other emerging markets in order to help understand the differences between the cultures and provide practitioners with different approaches to succeed in different countries (Sreen et al., 2018, Ng, 2103).

## **5. Conclusion**

According to the TPB, beliefs and attitudes will influence consumers' intentions toward online shopping. Attitude explains consumers' loyalty and their continuance intention. A higher positive attitude is directly related to consumers' online purchase decisions, and conversely, a negative attitude leads to consumers avoiding purchases (Amoroso and Lim, 2017). Similarly, perceived behavioral control has a strong effect on behavior intention. More control on an uncertain environmental event, will help individuals to reduce their perception of risk and uncertainty, thus significantly influencing their perceptions of risk, stress and satisfaction (Li et al., 2018, Kim and Chung, 2011). Thus, as much as consumers perceive they can control their purchase decisions, their behavioral intention can increase (Kim and Chung, 2011). Online retailers need to make efforts to enhance consumers' perceived control in the online purchase context that will help consumers to make a decision to purchase online (Li et al., 2018). Subjective norm is a strong determinant of behavior

intention. It is the most influential variable of purchase intention (Elseidi, 2018). If individuals believe that their referents agree to performing the behavior, it will increase the likelihood that an individual or groups approve performing a specific behavior. Thus, subjective norm influences individuals' intention to perform the online purchase behavior (Elseidi, 2018). Culture is a complex and multifaceted phenomenon that consists of a set of beliefs and behaviors shared by a group of people. Culture plays a significant role in an online purchasing context (Wu et al., 2018). It has been argued that the difference in consumers' behavior in different countries is a result of cultural differences (Hallikainen and Laukkanen, 2018). This is because culture affects the behavior of social network users and their intention to purchase on social commerce sites (See and Ng, 2013). Furthermore, culture enhances the interaction between attitude and consumers' online purchase intention. Thus, developing a model in which culture moderates the relationship between consumers' attitude toward online purchase and consumers' online purchase intention, is imperative. This model can explain better how different cultures affect purchase intentions in the online purchasing context. Although there is agreement about the importance of culture to online purchase intention, and there have been some efforts to investigate the relationship, little is known about the contribution of culture dimensions to online purchase intention. Current literature does not answer how different cultures affect purchase intentions on social shopping sites to produce a better understanding of online purchase intention (Hsu et al., 2017; Marticotte and Arcand, 2017; Lu et al., 2017; Hsu and Lin, 2016). Furthermore, how cultural dimensions can explain variance in consumer trust in e-commerce, is also an under-explored topic.

#### *Future Research*

Current literature has provided arguments that cultural dimensions matter for online purchase intention (Sreen et al., 2018; Hallikainen and Laukkanen, 2018; Wang et al., 2017; Capece et al., 2013; Ng, 2013; An and Kim, 2008; Greenberg et al., 2008; Moon et al., 2008). However, this literature has some limitations: (i) although there is agreement that culture is an important determinant of consumers' intention to purchase online, and there have been some efforts to investigate the relationship, little is known about the contribution of culture dimensions to online purchase intention, and very few studies have investigated the role of culture in online retailing (Richard and Habibi, 2016, Capece et al., 2013). Future research needs to investigate how different cultures affect purchase intentions on social shopping sites to produce a better understanding of purchase intention and the subsequent purchase behavior; (ii) most of the current research has focused on investigating the relationship between cultural values and purchase intention in the developed countries' markets; very few previous studies have investigated the impact of cultural values on purchase intention in emerging markets (Sreen et al., 2018; Ng, 2013). Future research needs to investigate the impact of cultural values on purchase intention in the emerging markets in order to help understand the differences between the cultures and provide practitioners with different approaches to succeed in different countries; (iii) the role of culture in enhancing the relationship between attitude and consumers' online purchase intention has received less attention in the literature. In other words, very few studies have examined the key factors of consumer online purchase from a cross-cultural perspective (Ng, 2103). Future research needs to further investigate the moderating role of culture on attitude and consumers' online purchase under different cultural settings; and (iv) Hofstede's theory can provide researchers with a comprehensive and well developed tool to analyze the interaction between web and e-commerce characteristics and cultural characteristics. Future research needs to develop a model that considers Hofstede's cultural dimensions to examine the interaction between consumers' attitude and online purchase intention under different cultural settings.

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## Appendix

Table 1. Summary of previous studies on intention to purchase and culture

<i>NO</i>	<i>Author/s</i>	<i>Methodology employed</i>	<i>Characteristics of variables used</i>	<i>Research finding</i>
1	Sreen et al. (2018)	India Online survey questionnaire Educated urban consumers (n=1100) SEM Theory of Planned Behavior (TPB)	<ul style="list-style-type: none"> <li>• Cultural dimensions Collectivism Long-term orientation (LTO) Man-nature orientation</li> <li>• Attitude</li> <li>• Subjective norm</li> <li>• Purchase intention</li> </ul>	<ul style="list-style-type: none"> <li>• Collectivism and long-term orientation (LTO) are significantly related to attitude as a predictor of purchase intention.</li> <li>• Man-nature orientation is significantly related directly to purchase intention of green products.</li> </ul>
2	Hallikainen and Laukkanen (2018)	China and Finland Comparative study (n= 617) of university students SEM Hofstede's cultural dimensions theory	<ul style="list-style-type: none"> <li>• Culture dimensions: Collectivism, uncertainty avoidance, long-term orientation, power distance and masculinity</li> <li>• Trust</li> </ul>	<ul style="list-style-type: none"> <li>• They found that general disposition of trust can be explained by national culture, and that disposition to trust is a highly significant predictor of the perceived trustworthiness of an online store</li> </ul>
3	Wang et al. (2017)	China Field experiments in Hangzhou (n= 400) of young people Conditional process model analysis One-way analysis of variance (ANOVA)	<ul style="list-style-type: none"> <li>• Confucian culture</li> <li>• Attitude</li> <li>• Perceived value</li> <li>• Emotional green appeals</li> <li>• Purchase intention</li> </ul>	<ul style="list-style-type: none"> <li>• Attitude and perceived value have significant mediating effect on the relationship between emotional green appeals and purchase intention</li> <li>• Confucian culture is not a qualified moderator in this model.</li> </ul>
4	Capece et al. (2013)	Italy (n= 304) individuals in Rome Correlations, factor analysis TAM	<ul style="list-style-type: none"> <li>• Cultural dimensions (Power distance, individualism, masculinity, uncertainty avoidance and long-term orientation).</li> <li>• Perceived ease-of-use</li> <li>• Perceived usefulness</li> <li>• Trust</li> <li>• Intention to use e-commerce</li> </ul>	<ul style="list-style-type: none"> <li>• Results show that power distance and individualism affect significantly the relationship between trust and intention to use e-commerce in Italy.</li> </ul>
5	Ng (2013)	A cross-regional study Survey 284 respondents SEM Trust transference theory	<ul style="list-style-type: none"> <li>• Cultural dimensions (Power distance, individualism, masculinity, uncertainty avoidance and long-term orientation)</li> <li>• Trust</li> <li>• Intention to purchase in a social network community</li> </ul>	<ul style="list-style-type: none"> <li>• Culture (collectivism vs. individualism) moderates the relationship between social interactions (for both closeness and familiarity) and intention to purchase from a social commerce site.</li> </ul>
6	Moon et al. (2008)	New Zealand Survey (n= 116) undergraduate and graduate students in a New Zealand university Factor analysis	<ul style="list-style-type: none"> <li>• Cultural dimensions (Power distance, individualism, masculinity and uncertainty avoidance).</li> <li>• Product type</li> <li>• Price</li> <li>• Purchase intention</li> </ul>	<ul style="list-style-type: none"> <li>• Results shows that individualism is the only culture dimension to have a significant effect on purchase intention</li> </ul>

**Table 1. Summary of previous studies on intention to purchase and culture (Contd.)**

<i>NO</i>	<i>Author/s</i>	<i>Methodology employed</i>	<i>Characteristics of variables used</i>	<i>Research finding</i>
7	An and Kim (2008)	USA and Korea Survey (n=289) respondents Factor analysis	<ul style="list-style-type: none"> <li>• Cultural dimensions (Individualism-collectivism and uncertainty avoidance).</li> <li>• Online trust</li> </ul>	<ul style="list-style-type: none"> <li>• Individualism-collectivism dimension has indirect effects on online trust</li> <li>• Online trust is not only based on the attributes of Internet sellers and system- related factors but also on their interactions with the underlying cultural norms</li> </ul>
8	Greenberg et al. (2008)	Hong Kong and USA Survey (n=431) undergraduate students Factor analysis and correlations	<ul style="list-style-type: none"> <li>• Culture</li> <li>• Online trust</li> <li>• Security</li> <li>• Privacy risks</li> </ul>	<ul style="list-style-type: none"> <li>• Significant differences exist between consumers from Hong Kong and USA regarding the perceived level of online risks and the formation of trust.</li> <li>• Findings reiterate and underscore the importance of including national culture in studies of trust in e-commerce.</li> </ul>