



The Impact of Individualism/Collectivism and Masculinity/Femininity on Brand Loyalty: A Mediation Role of Perceived Ease of Use

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Abstract

Cultural dimensions have varying impacts on brand loyalty. This signifies that each cultural dimension is associated with brand loyalty in different ways. The influence of individualism/collectivism and masculinity/femininity dimensions on brand loyalty is dependent on the levels of these dimensions in different countries. Given the significance of cultural dimensions in relation to brand loyalty, this study aims to investigate the impact of individualism/collectivism and masculinity/femininity on brand loyalty, while also exploring the mediating role of perceived ease of use. The data for this study was collected through an online survey questionnaire, with a total of 501 respondents participating. The collected data was analyzed using Partial Least Square Structural Equation Modeling (PLS-SEM). The findings of the study revealed that both individualism/collectivism and masculinity/femininity dimensions have significant effects on brand loyalty. Additionally, the study indicated that masculinity/femininity dimension significantly impacts perceived ease of use. Furthermore, the study found that perceived ease of use partially mediates the relationship between masculinity/femininity dimensions and brand loyalty. Perceived ease of use was also found to have a significant positive effect on brand loyalty. This study contributes to the existing literature on brand loyalty by providing insights into the effects of individualism/collectivism and masculinity/femininity on brand loyalty. Additionally, it contributes to understanding the mediating effect of perceived ease of use in the relationship between individualism/collectivism, masculinity/femininity, and brand loyalty.

Keywords: brand loyalty; individualism/collectivism; masculinity/femininity; perceived ease of use; Hofstede cultural dimensions

1. Introduction

Cultural dimensions have a significant impact on consumer behavior and loyalty. Culture plays a crucial role in the selection and preferences of buyers (De Mooij & Hofstede, 2011). Consumer culture is important as cultural values and customs influence consumer preferences and loyalty. Therefore, firms need to consider the importance of culture when developing their marketing strategies (Thompson & Chmura, 2015).

Brand loyalty refers to consumers' preference for and selection of competing brands, regardless of price differences (Maroufkhani et al., 2022). Brand loyalty helps firms increase their market share and gain a competitive advantage over their competitors (Nasir, 2005). Geert Hofstede began researching cultural values in the 1970s and identified four dimensions of national culture: power distance, individualism vs. collectivism, masculinity vs. femininity, and uncertainty avoidance. Additional research later added short-term vs. long-term orientation and indulgence vs. restraint (Hofstede et al., 2010). In this study, we will focus on individualism vs. collectivism and masculinity vs. femininity, which are included in Hofstede's cultural dimensions.

Individualism vs. collectivism (IDV) is a cultural difference based on the balance between individual and group identity in society. In collectivist countries, families are typically extended and include multiple members, such as parents, children, and other relatives. Children in these cultures are raised with a sense of "we." In contrast, some societies only consist of parents and children, and children in these cultures grow up with a sense of "I." Individualistic cultures prioritize self-care and immediate family, while collectivist cultures prioritize caring for extended family and relatives as a sign of loyalty (Hofstede, 2001, 2016; Hofstede et al., 2010; Hofstede & McCrae, 2004).

Masculinity vs. femininity (MAS) reflects societal expectations regarding gender roles. Masculine societies value strength and assertiveness in men, while feminine societies emphasize cooperation, care, and concern for quality of life. A society is considered masculine if competition and toughness are encouraged, whereas a society is considered feminine if cooperation and caring for others are encouraged, and gender roles are distributed within the family (Hofstede, 2001, 2016; Hofstede et al., 2010; Hofstede & McCrae, 2004).

Perceived ease of use is one of the primary variables of technology acceptance model developed by Davis (1986). Perceived ease of use indicates "The degree to which a person believes that using a particular system would be free of effort." (Davis, 1989: 320). The Technology Acceptance Model is one of the most widely used theories in the field of information systems. It is also highly applicable to studying culture, gender, and organizational structure (Lee et al., 2003). In a study by Straub (1994) that investigated the influence of culture on attitudes toward media usage using the primary variables of the Technology Acceptance Model, it was found that culture plays a crucial role in shaping these attitudes. Both culture as a contingent factor and individual-related factors have a significant impact on the primary variables of the Technology Acceptance Model (Schepers & Wetzels, 2007). Specifically, Western cultures tend to prioritize perceived usefulness, while non-Western cultures place more importance on perceived ease of use (Schepers & Wetzels, 2007).

According to Zhang et al. (2022), national culture also plays a significant role in brand loyalty, and it moderates the impact of electronic banking on brand loyalty. Different cultural

dimensions have varying effects on brand loyalty; the dimension of uncertainty avoidance weakens brand loyalty, while the dimensions of masculinity and femininity have a positive effect (Dikčius et al., 2023). Interestingly, the dimension of individualism-collectivism has no significant impact on brand loyalty (Dikčius et al., 2023). Consumers with high levels of collectivism or masculinity tend to develop stronger brand loyalty, while those with lower levels of collectivism or masculinity do not exhibit the same level of loyalty (Leslie, 2011).

There is limited research on the cultural perspective and its impact on customer and brand loyalty (Dikčius et al., 2023; Zhang et al., 2022). Adams et al. (1992) also emphasize the need for further research to investigate the mediation and moderation roles of primary variables in the technology acceptance model on culture and branding. Dikčius et al. (2023) and Zhang et al. (2022) additionally call for more studies on the cultural dimension and its effect on consumer and brand loyalty. Therefore, in response to these identified gaps, this study explores the influence of individualism, collectivism, and masculinity/femininity cultural dimensions on brand loyalty. The study also examines perceived ease of use as the mediating variable in this relationship. To the best of our knowledge, there are no studies that have tested the impact of these cultural dimensions on brand loyalty in the presence of intervening variables.

The existing studies have found a significant relationship between cultural dimensions and primary variables of the technology acceptance model. For instance, Yoon (2009) found a relationship between masculinity/femininity and primary variables of the technology acceptance model. Akour et al. (2006) examined the relationship between Hofstede's cultural dimensions and perceived ease of use. Mazan & Çetinel (2022) also explored the relationship between Hofstede's cultural dimensions and perceived ease of use, as well as perceived usefulness. Furthermore, research on brand loyalty and perceived ease of use suggests that brand loyalty is positively influenced by perceived ease of use (Raihan, 2023; Wilson et al., 2021). Therefore, this study focuses on investigating the role of perceived ease of use as a mediating variable, specifically examining whether it helps explain the impact of individualism versus collectivism and masculinity/femininity cultural dimensions on brand loyalty.

By addressing the identified gaps, this study makes several contributions. Firstly, it tests different models on the relationship between individualism-collectivism, masculinity/femininity, and brand loyalty. It is one of the first studies to investigate the impact of cultural dimensions such as individualism-collectivism and masculinity/femininity on brand loyalty. Secondly, it examines the relationship between individualism-collectivism, masculinity/femininity, and perceived ease of use. Lastly, it assesses the mediating effect of perceived ease of use on the relationship between individualism-collectivism, masculinity/femininity, and brand loyalty.

2. Literature Review and Hypotheses Development

2.1. Individualism/collectivism and masculinity/femininity dimensions

According to Hofstede et al. (2010), culture can be defined as “*the collective programming of the mind distinguishing the members of one group or category of people from others*”.

Geert Hofstede initiated cultural value research in the 1970s and identified four dimensions of national culture: power distance, individualism vs. collectivism, femininity vs.

masculinity, and uncertainty avoidance. Subsequent research later included the dimensions of short-term vs. long-term orientation and indulgence vs. restraint (Hofstede et al., 2010).

Individualism vs Collectivism (IDV) is a measure of cultural differences based on the importance placed on being an individual versus being part of a group in society. In collectivist countries, families are typically large and include multiple generations, such as parents, children, and extended relatives. Children in these cultures are raised with a strong emphasis on the collective "we" mindset. On the other hand, some societies consist of only a parent and child, leading to an upbringing focused on the individual "I" concept. In individualistic cultures, people are expected to take care of themselves and their immediate family, whereas collectivist cultures prioritize the well-being of the entire family and extended relatives, emphasizing loyalty. Scoring higher in this dimension indicates a more individualistic outlook, while a lower score reflects a more collectivist mindset (Hofstede, 2001, 2016; Hofstede et al., 2010; Hofstede & McCrae, 2004).

Masculinity vs Femininity (MAS) measures the extent to which a society values traditional gender role. Masculinity refers to the expectation that men should be strong and assertive, while women are expected to be caring, shy, and concerned with quality of life. A society is considered masculine if competition and assertiveness are encouraged. Conversely, a society is considered feminine if cooperation and caring for others are valued, and roles are distributed within the family. (Hofstede, 2001, 2016; Hofstede et al., 2010; Hofstede & McCrae, 2004).

2.2. Brand Loyalty

Brand loyalty is an important component of brand equity assets because it contributes to the overall value of the brand for the firm. It also serves as a catalyst for loyalty-building activities within the company. By implementing various loyalty programs, the firm can further enhance its brand equity. Brand loyalty plays a significant role in determining the value of a brand. Brands with high levels of customer loyalty tend to generate higher profits and returns, ultimately increasing their overall value. In contrast, brands without a loyal customer base struggle to generate substantial profit. In fact, retaining existing customers is often more cost-effective than acquiring new ones. Additionally, brand loyalty acts as a barrier to new competitors, as it is difficult for them to convince loyal customers to switch allegiances.

A study conducted among credit card users found that the profitability of a credit card tends to increase after the first year, with the second and third years being particularly lucrative (Aaker, 2012). In summary, brand loyalty is vital for both the formulation and enhancement of brand equity. It contributes to the overall value of the brand and serves as a deterrent to new entrants (Aaker, 1995).

2.3. Perceived Ease of Use

Perceived ease of use is one of the primary variables of technology acceptance model developed by Davis (1986). Perceived ease of use indicates "The degree to which a person believes that using a particular system would be free of effort." (Davis, 1989: 320). Technology acceptance model is one of highly used theories in information system, it is also highly used in culture, gender, and organizational structure (Lee et al., 2003).

2.4. Individualism/Collectivism, Masculinity/Femininity and Brand Loyalty

Cultural dimensions have varying effects on brand loyalty. Each cultural dimension is associated with brand loyalty in a distinct manner. The impact of the individualism/collectivism dimension on brand loyalty is influenced by the level of this dimension in different countries. Countries that score average in this dimension tend to display high levels of loyalty (Dikčius et al., 2023; Gracia et al., 2015). The individualism/collectivism dimension has a positive influence on brand loyalty (A. Huang, 2015). In the United States of America, consumers who lean more towards collectivism demonstrate higher levels of brand loyalty. This suggests that the individualism/collectivism dimension is positively linked to brand loyalty. Based on these arguments, the study developed the following hypothesis.

H1: Individualism/collectivism have significant impact on brand loyalty.

Cultural dimensions are predictors of brand loyalty, with the masculinity/femininity dimension positively relating to brand loyalty (A. Huang, 2015). This means that consumers with higher levels of masculinity are more likely to have higher brand loyalty. On the other hand, lower levels of masculinity/femininity weaken consumer loyalty towards the brand. Conversely, a higher level of masculinity/femininity dimension leads to increased brand loyalty. As a result, the masculinity/femininity dimension has a positive impact on brand loyalty (Dikčius et al., 2023). Based on these findings, the study developed the following hypothesis:

H2: Masculinity/femininity collectivism have significant impact on brand loyalty.

2.5. Individualism/Collectivism, Masculinity/Femininity and Perceived Ease of Use

The Technology Acceptance Model is one of the most widely used theories in the field of information systems. It is also frequently applied in studies examining the influence of culture, including factors such as gender and organizational structure (Lee et al., 2003). The Masculinity/Femininity dimension has been found to moderate the relationship between perceived usefulness and perceived ease of use (Yoon, 2009). Additionally, the Hofstede cultural dimensions have been found to positively associate with perceived ease of use (Akour et al., 2006). However, it should be noted that the effects of Hofstede cultural dimensions on the primary variables of the Technology Acceptance Model (perceived usefulness and perceived ease of use) can vary among different cultures (McCoy et al., 2007).

Huang et al. (2003) argue that the effect of subjective norm on perceived ease of use is particularly powerful in cultures with low power distance. Individual-level cultural dimensions also play a significant role in the acceptance and usage of technology (Lok, 2016).

In Western cultures, perceived usefulness tends to be more influential, whereas in non-Western cultures, perceived ease of use is considered more important (Schepers & Wetzels, 2007). Both culture as a contingent factor and individual-related factors have a major impact on the primary variables of the Technology Acceptance Model (Schepers & Wetzels, 2007).

According to Özbilen (2017), individualism/collectivism and masculinity/femininity dimensions significantly influence the primary variables of the Technology Acceptance

Model (perceived usefulness and perceived ease of use). It has been found that the Masculinity/Femininity dimension has a positive effect on perceived ease of use (Jan et al., 2022). Based on these arguments, the study developed the following hypothesis:

H3: Individualism/collectivism have significant impact on perceived ease of use.

H4: Masculinity/femininity have significant impact on perceived ease of use.

2.6. Mediation Role of Perceived Ease of Use

Adams et al. (1992) advocate for further research to explore the roles of the primary variables of the Technology Acceptance Model (TAM), namely perceived usefulness and perceived ease of use, as mediators and moderators in the context of culture. Straub (1994) conducted a study to examine the influence of culture on attitudes toward media usage, utilizing the primary variables of TAM as a mediator. The study revealed that culture significantly influences attitudes toward media usage, and the relationship is mediated by perceived usefulness and perceived ease of use.

Akour et al. (2006) discovered that the primary variables of TAM, perceived usefulness and perceived ease of use, play a significant mediating role in the impact of cultural dimensions on the intention to use the internet. Additionally, the primary variables of TAM mediate the relationship between Hofstede's cultural dimensions and the intention to use digital tourism (Mazan & Çetinel, 2022). Consequently, the study argues that perceived ease of use acts as a mediating factor in the influence of individualism/collectivism and masculinity/femininity on brand loyalty, leading to the formulation of the following hypotheses:

H5: Perceived ease of use mediates the impact of individualism/collectivism on brand loyalty.

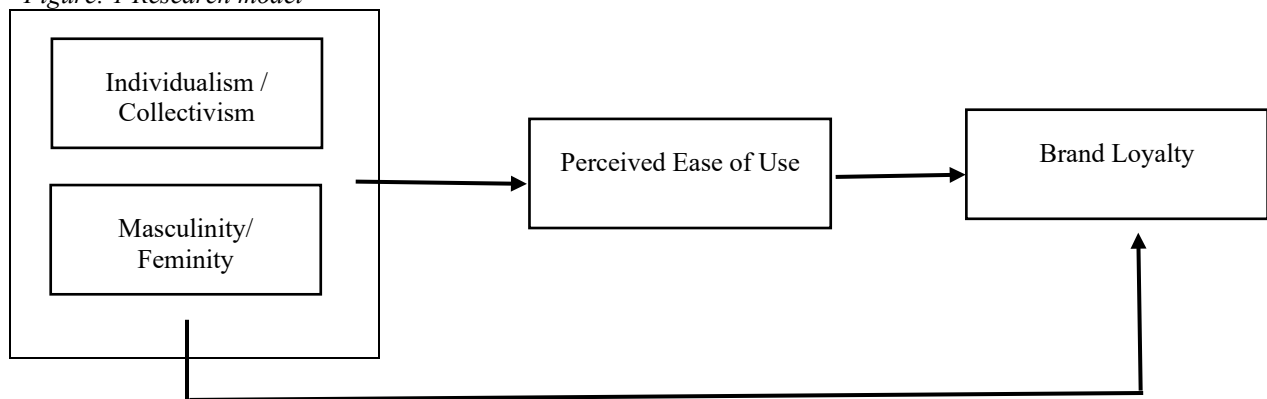
H6: Perceived ease of use mediates the impact of masculinity/femininity on brand loyalty.

2.7. Perceived Ease of Use and Brand Loyalty

The primary variables of the technology acceptance model are positively associated with brand loyalty. According to Wilson et al. (2021), perceived ease of use has a positive impact on brand loyalty. Similarly, Raihan (2023) found that brand loyalty is positively and significantly influenced by perceived ease of use. Siagian et al. (2022) also noted that perceived ease of use directly affects the intention to use a system, which in turn affects brand loyalty. Furthermore, the study conducted by Ozturk et al. (2016) revealed that convenience, compatibility, and perceived ease of use (PEOU) significantly impact brand loyalty. The researchers also discovered that compatibility plays a significant role in influencing perceived ease of use, while convenience and perceived ease of use have a notable effect on brand loyalty. Based on these theories, the study developed the following hypothesis:

H7: Perceived ease of use has positive significant effect on brand loyalty;

Figure: 1 Research model



Source: Researchers' own computation, (2024)

Figure 1: shows the research model created based on the research hypotheses. In the research, individualism/collectivism and masculinity/femininity are independent variables, perceived ease of use is the mediating variable and brand loyalty is the dependent variable.

3. Methodology and Hypothesis Testing

This paper aims to explore the influence of individualism/collectivism and masculinity/femininity on brand loyalty, specifically focusing on smartphone brands. The research was conducted in Turkey, with a sample size of 501 participants. The study utilized individual-level cultural dimensions to gather data, employing online survey questionnaires. Participants were asked to provide responses to brand equity-related inquiries based on their current smartphone brand. The measurement model's reliability and validity (structural validity) were assessed using Smart-PLS 4.1 software.

3.1. Measurement

The items were assessed using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The study employed scales from prior research; the scales for individualism/collectivism and masculinity/femininity were modified versions of the CV scale developed by Yoo et al. (2011), while the brand loyalty scale was adapted from Yoo et al. (2000). Smartphone brands, namely Apple, Samsung, Huawei, Xiaomi, and Oppo, were chosen due to their high familiarity among the study population. By selecting brands that the respondents are well-acquainted with and have personal experience of, the questionnaire items can elicit more accurate responses (Yoo et al., 2000). The scale for perceived ease of use was adapted from Davis (1989).

3.2. Data Collection

In order to accomplish the objective of the study, a quantitative research approach was employed to gather data from smartphone users in Turkey. A convenience non-probability sampling method was utilized. Initially, the scales were developed in English and subsequently translated into Turkish with the assistance of two bilingual experts. A total of 600 questionnaires were distributed to respondents, with their explicit consent. Among these, 555 questionnaires were completed and returned. Upon excluding data from respondents who

showed unfamiliarity with the topic, a total of 501 respondents were retained for further analysis, resulting in a response rate of 83.5%. Among the participants, 209 (41.7%) were male and 292 (58.3%) were female. The average age of the respondents was 28.59.

3.3. Measurement Model

The variables investigated in this study encompassed the Hofstede cultural dimensions of individualism/collectivism (IDV1 to IDV5) and masculinity/femininity (MAS1 to MAS4). The dependent variable was brand loyalty (BL1 to BL3). Perceived ease of use (PEOU1 to PEOU4) was employed as the mediating variable to explore the association between individualism/collectivism, masculinity/femininity, and brand loyalty. The reliability of the constructs was evaluated using outer loadings, Cronbach's Alpha, and composite reliability. Each construct exhibited superior loadings with respect to its corresponding items, and the Cronbach's Alpha values surpassed the threshold of 0.700, except for individualism/collectivism, where the items were retained based on established composite reliability. All constructs achieved composite reliability values exceeding the recommended threshold of 0.700.

Table 1: Reliability and validity analysis

Construct	Item	Loading	Cronbach's Alpha	CR	AVE
Brand Loyalty	BL1	0.859	0.862	0.916	0.784
	BL2	0.917			
	BL3	0.879			
Individualism/Collectivism	IDV1	0.817	0.669	0.818	0.600
	IDV2	0.738			
	IDV5	0.767			
Masculinity/Feminity	MAS1	0.751	0.755	0.845	0.577
	MAS2	0.729			
	MAS3	0.796			
	MAS4	0.760			
Perceived ease of use	PEOU1	0.941	0.946	0.961	0.861
	PEOU2	0.923			
	PEOU3	0.943			
	PEOU4	0.904			

Source: Own computation (2024)

In order to establish convergent validity, we calculated the average variance extracted (AVE) of the constructs. The obtained values surpassed the recommended threshold of 0.500. The reliability and validity of the constructs are summarized in Table 1. Discriminant validity was assessed by evaluating the HTMT ratio, with all ratios found to be below the recommended threshold of 0.85. Table 2 presents a summary of the HTMT ratio values.

Table 2. HTMT ratio

	BL	IDV	MAS	PEOU
BL				
IDV	0.254			
MAS	0.248	0.204		
PEOU	0.408	0.107	0.328	

Source: Own computation (2024)

3.4. Results Hypothesis Testing of the Research Model and Discussion

The initial step in evaluating the structural model involves the assessment of multicollinearity through the utilization of VIF. In this study, the VIF values were found to be below the recommended threshold of 5. More specifically, the VIF values ranged from 1.211 to 4.367, remaining below the aforementioned threshold of 5 (see Hair Jr et al., 2021).

Consequently, the issue of multicollinearity does not pose a concern within the scope of this study. Furthermore, the explanatory power of the model was determined by examining the R squared values, which amounted to 0.25 for perceived ease of use and 0.356 for brand loyalty. This implies that 25% of perceived ease of use and 35.6% of brand loyalty can be elucidated by the exogenous variables.

The R squared values vary from 25% to 35.6%, which can be classified as weak to moderate (Hair et al., 2013). Moreover, the predictive relevance of the model was evaluated through the application of Q squared. The Q squared values ranged from 0.057 to 0.070, indicating that the model exhibits predictive relevance.

3.4.1. Direct Relationships

The next step in the study is to test the proposed hypotheses. The findings of the study indicate that individualism/collectivism has a significant impact on brand loyalty ($\beta = -0.152$, $t = 3.676$, $p = 0.000$), thus confirming H1. Additionally, the study demonstrates that masculinity/femininity significantly influences brand equity ($\beta = -0.095$, $t = 2.051$, $p = 0.040$), supporting H2.

The results of the PLS-SEM analysis reveal the effects of individualism/collectivism and masculinity/femininity on perceived ease of use as follows: the impact of individualism/collectivism on perceived ease of use is not statistically significant as hypothesized ($\beta = -0.065$, $t = 1.334$, $p = 0.182$), indicating that H3 is not supported. However, the study reveals a negative and significant effect of masculinity/femininity on perceived ease of use ($\beta = -0.272$, $t = 6.211$, $p = 0.000$), thereby supporting the proposed relationship. Consequently, H4 is accepted.

Furthermore, the SEM analysis reveals a positive and significant effect of perceived ease of use on brand loyalty ($\beta = 0.330$, $t = 6.668$, $p = 0.000$), providing support for H7. The direct relationships of the study are summarized in Table 3.

Table 3: Direct Relationship Analysis

Hypothesis	B	SE	T	p Values	Results
H1: IDV -> BL	-0.152	0.041	3.676	0.000	Supported
H2: MAS -> BL	-0.095	0.046	2.051	0.040	Supported
H3: IDV -> PEOU	-0.065	0.049	1.334	0.182	Not Supported
H4: MAS -> PEOU	-0.272	0.044	6.211	0.000	Supported
H7: PEOU -> BL	0.330	0.050	6.668	0.000	Supported

Source: Own computation (2024)

3.4.2. Mediation Analysis

Mediation analysis was conducted to examine the mediating role of perceived ease of use in the relationship between cultural dimension and brand equity. The results presented in Table 4 indicate that perceived ease of use did not significantly mediate the relationship between individualism/collectivism and brand loyalty ($\beta = -0.022$, $t = 1.333$, $p = 0.183$). This suggests that perceived ease of use did not serve as a mediator between individualism/collectivism and brand loyalty, leading to the rejection of H5. However, the study did find that perceived ease of use mediated the effect of masculinity/femininity on brand loyalty ($\beta = -0.090$, $t = 4.852$, $p = 0.000$). Furthermore, the direct effect of masculinity/femininity on brand equity was found to be significant ($\beta = -0.185$, $t = 4.250$, $p = 0.000$), indicating that masculinity/femininity influences brand equity through its impact on perceived ease of use. It is important to note that perceived usefulness partially mediates this effect. Therefore, H6 is accepted. The mediation effect is summarized in Table 4.

Table 4. Mediation analysis

Total Effects			Direct effects				Indirect effects			
Coefficient	T Value	p Value	Coefficient	T Value	p Value	Hypothesis	Coefficient	SE	T value	p Value
-0.174	4.013	0.000	-0.152	3.676	0.000	H:5 IDV -> PEOU -> BL	-0.022	0.016	1.333	0.183
-0.185	4.250	0.000	-0.095	2.051	0.040	H:6 MAS-> PEOU -> BL	-0.090	0.019	4.852	0.000

Source: Own computation (2024).

4. Conclusion

The purpose of this study was to examine the influence of individualism/collectivism and masculinity/femininity on brand loyalty, with the mediating role of perceived ease of use. To achieve this objective, a total of 501 questionnaires were collected from participants. PLS-SEM was employed to analyze the relationships between the variables. The investigation of the proposed hypotheses yielded valuable findings. The study demonstrates that individualism/collectivism significantly impacts brand loyalty, which is consistent with the empirical findings of Dikćius et al. (2023) and Gracia et al. (2015). Moreover, the study suggests that masculinity/femininity also has a notable effect on brand loyalty, aligning with the conclusions of Huang (2015) regarding the influence of masculinity/femininity on long-term brand loyalty. Additionally, the study reveals that perceived ease of use partially mediates the relationship between masculinity/femininity and brand loyalty. Perceived ease of use exhibits a positive and significant impact on brand loyalty, in line with the findings of Raihan (2023) and Wilson et al. (2021). Furthermore, the study identifies a significant effect of masculinity/femininity on perceived ease of use.

This paper contributes to the existing literature in several ways. Firstly, it empirically tests a model examining the relationship between individualism/collectivism, masculinity/femininity, and brand loyalty in the smartphone industry. Secondly, it investigates the influence of individualism/collectivism and masculinity/femininity on perceived ease of use. Thirdly, it explores the mediating role of perceived ease of use in the relationship between individualism/collectivism, masculinity/femininity, and brand loyalty in the smartphone industry. Fourthly, it further explores the association between perceived ease of use and brand loyalty, identifying a significant positive effect. Lastly, it adds to the

existing literature on Hofstede's cultural dimensions and brand loyalty by specifically focusing on the relationship between individualism/collectivism, masculinity/femininity, and brand loyalty in the context of the smartphone industry. To the best of the researcher's knowledge, no previous studies have specifically examined this relationship. Ultimately, this paper aids smartphone companies in comprehending the impact of consumer culture on the formation and development of brand loyalty, considering that culture is the most influential factor in international markets.

Despite its valuable contributions, this study does have some limitations. Primarily, it solely examines the influence of two cultural dimensions on brand loyalty using one country as an example. Future research should expand to encompass different countries and consider all cultural dimensions. Additionally, this study only takes perceived ease of use into account as the mediating variable, whereas future research could incorporate additional variables such as perceived usefulness and perceived risk. Furthermore, future research should explore the moderating effects of key variables in the technology acceptance model.

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