

Cultural Differences in Deliberate Counterfeit Purchase Behavior

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Purpose: This paper explores the moderating effects of four personal cultural orientations (independence, interdependence, risk aversion, and ambiguity intolerance) on the relationships among counterfeit proneness, subjective norms, ethical judgments, product evaluation and purchase intentions for counterfeit products.

Design/methodology/approach: A field study with 840 consumers in Hong Kong using a self-administered structured questionnaire is used to test all the hypotheses.

Findings: Consumers with high (low) scores on interdependence (independence) show stronger positive effects of counterfeit proneness on subjective norms and its effects on the counterfeit evaluation and purchase intentions. In contrast, consumers with high (low) scores on independence (interdependence) show stronger positive effects of counterfeit proneness on ethical judgments and its effects on counterfeit evaluation and purchase intentions. Consumers with higher scores on risk aversion and ambiguity intolerance show negative moderating effects on most of the relationships in the unified conceptual framework.

Research limitations/implications: We collected data in Hong Kong that is predominantly Chinese in culture. Hence, future research in other parts of the world with more diverse cultural values would help test the validity and generalizability of our results.

Practical implications: Our findings would be useful for managers of genuine brands to learn more about the process that explains deliberate counterfeit purchase behavior.

Originality/value: We extend the unified conceptual framework for deliberate counterfeit purchase behavior by incorporating four personal cultural orientations to explore cultural differences in the consumer decision-making process underlying this behavior.

Keywords: attitudes; counterfeiting; counterfeit proneness; ethical judgment; personal cultural orientations; subjective norms

Introduction

Despite growing attention on the cultural differences in deliberate counterfeit purchase behavior (e.g., Eisend, 2019; Khandeparkar and Motiani, 2018; Li et al., 2018; Molina-Castillo et al., 2021; Tunçel, 2021; Wu et al., 2019), there are fewer studies on the role of individual-level cultural factors (e.g., Eisend et al., 2017; Kim and Johnson, 2014; Malik et al., 2020; Xiao et al., 2018). For example, Kim and Johnson (2014) examine the moderating role of individuals' independent (vs. interdependent) self-view in the relationship between moral emotions and judgments about the counterfeit purchase. However, Malik et al. (2020) treat interdependent and independent self-traits as drivers of counterfeit purchase intentions with individual characteristics, such as susceptibility to normative influence, readiness to take social risk, and status acquisition as mediators in this process. Thus, there is no consensus about the role of these personal cultural factors in this context.

Similarly, Xiao et al. (2018) study the moderating role of self-monitoring and perceived social risk on the effects of actual-ideal self-discrepancy on consumers' attitudes towards counterfeit branded luxuries. However, they simply use national level scores on the Collectivism-Individualism dimension to compare the responses from consumers in Australia, Hong Kong and USA. Finally, Eisend et al. (2017) analyze 610 effect sizes from 98 independent studies to show that risk propensity and reduced integrity drive counterfeit purchase behavior in the developed markets and risk aversion reduces it in the developing countries but it is not clear to what extent these findings are applicable at individual consumer level. As a result, despite many studies involving a number of countries (e.g., Eisend et al., 2017; Penz and Stöttinger, 2008; Tunçel, 2021), absence of a comprehensive conceptual framework to examine the impact of individual-level cultural factors on counterfeit purchase behavior, makes it almost impossible to generalize their findings and learnings about consumers in different parts of the world.

We address this important research gap and extend an existing conceptual framework for deliberate counterfeit purchase behavior (Sharma and Chan, 2016), by incorporating four personal cultural orientations - independence, interdependence, risk aversion, and ambiguity intolerance (Sharma, 2010) and their moderating effects on the relationships among counterfeit proneness, subjective norms and ethical judgments about buying a counterfeit product, counterfeit product evaluation and purchase intentions. We chose these four PCOs because these explain greater cross-cultural differences in consumer behavior than the other six PCOs (Sharma, 2010). Therefore, we expect these four PCOs to also explain greater individual-level cultural differences in deliberate counterfeit purchase behavior and help address the above research gap by providing a common conceptual model that can be used with consumers from diverse cultures around the world. A field study with 840 consumers in Hong Kong supports most of our hypotheses. We discuss the conceptual contribution and managerial implications of our findings with their limitations and future research directions.

Theoretical background and conceptual development

Cross-cultural differences in counterfeit purchase behavior

Past studies on cross-cultural differences in deliberate counterfeit purchase behavior mostly focus on a unique aspect of counterfeit purchase and consumption in one or more countries, and there is still no comprehensive conceptual framework to guide systematic investigation of individual-level cultural differences in counterfeit purchase behaviors (Eisend, 2019). We address this gap by extending Sharma and Chan's (2016) unified conceptual framework, using four personal cultural orientations (Sharma, 2010) to explore the cultural differences in the attitudes, ethical judgments, subjective norms and purchase intentions towards counterfeit products. Next, we describe all the constructs in Sharma and Chan's (2016) unified conceptual framework, followed by the four personal cultural orientations.

Counterfeit proneness (CP): CP, defined as a general tendency of consumers to like, prefer, purchase, and use counterfeit products, is a relatively stable psychological trait different from the attitude towards counterfeiting because it also represents affective and behavioral aspects of counterfeit purchase and consumption besides the cognitive and socio-normative aspects that are tapped into by attitude towards counterfeiting or buying a specific counterfeit product (Sharma and Chan, 2011). Counterfeit prone consumers are more likely to buy counterfeit products and to justify these purchases (Sharma and Chan, 2011). They do not consider counterfeit products as inferior (Nia and Zaichkowsky, 2000) and may even see purchase of counterfeits as a useful means to enhance societal welfare (Ang et al., 2001). Counterfeit prone consumers are also less concerned about the legal consequences or public welfare concerns about counterfeit purchase and consumption (Sharma and Chan, 2011). Thus, counterfeit proneness represents the “intrinsic characteristics of an individual that may prompt them to prefer, purchase, and use counterfeits over genuine products on a regular basis” (Sharma and Chan, 2016; p.606).

Subjective norms (SUB): According to the theory of reasoned action (Fishbein and Ajzen, 1975) subjective norms consist of normative beliefs and motivation to comply with those beliefs whereas personal attitudes comprise of behavioral beliefs and outcome expectations about these beliefs. Prior research shows significant effects of consumer attitudes on their subjective norms for the purchase of controversial products (Xu et al., 2004) and choice of tourism destination (Quintal et al., 2010). Based on these findings, Sharma and Chan (2016) argue that counterfeit proneness would have a positive effect on the subjective norms about buying a counterfeit product.

Ethical judgments (ETH): Many past studies explore counterfeit purchase behavior using the ethical decision-making model (Hunt and Vitell, 1986) that consists of ethical problem recognition, consideration of alternatives or actions to solve the ethical problem, alternative

evaluation and an ethical judgment. However, we find many differences in the influence of consumer ethical decision making across product categories e.g., music CDs and DVDs (Ang et al., 2001; Wang, 2005), personal accessories (Maldonado and Hume, 2005), clothing (Moon et al., 2018), and others (de Matos et al., 2007). Sharma and Chan (2016) address these mixed findings by arguing that counterfeit proneness has a positive effect on the ethical judgments about buying a counterfeit product.

Counterfeit product evaluation (PE): Prior research shows mixed results about the influence of attitude towards counterfeiting or a specific counterfeit product, ethical judgments and subjective norms on counterfeit purchase behavior and intentions (de Matos et al., 2007; Staake et al., 2009). Sharma and Chan (2016) address this by including counterfeit product evaluation in their unified framework because consumers' decision to buy or not buy a counterfeit product may depend on other attributes such as quality and price, besides their levels of counterfeit proneness, subjective norms or ethical judgments towards buying that counterfeit product. Hence, they include product evaluation as a mediator in the influence of counterfeit proneness, subjective norms, and ethical judgments, on the purchase intentions towards a counterfeit product (Sharma and Chan, 2016). We use this unified framework (Figure 1) as it extends the relatively more conventional TPB model in the context of deliberate counterfeit purchase behavior.

< Insert Figure 1 about here >

Personal cultural orientations

Prior research on cross-cultural differences in ethical behaviors and counterfeit consumption mostly uses Hofstede's (2001) framework (e.g., Vitell et al., 1993). However, there is growing evidence that Hofstede's national cultural dimensions may not be applicable at individual level (Oyserman, Coon and Kimmelmeier, 2002). Sharma (2010) addresses these

concerns by Reconceptualizing Hofstede's five national cultural dimensions as ten personal cultural orientations (PCO) and introduces a new 40-item PCO scale to measure these. In this paper, we hypothesize and test the moderating influence of four personal cultural orientations (i.e., independence, interdependence, risk aversion and ambiguity intolerance) on the relationships among counterfeit proneness, subjective norms, ethical judgments, product evaluation and purchase intentions for counterfeit products in the unified conceptual framework (Sharma and Chan, 2016). We chose these four PCOs because unlike the other six PCOs, these four provide the strongest individual-level cross-cultural differences in customers' product evaluations and purchase intentions (Sharma 2010). Past studies also indicate the importance of these four PCOs in the context of counterfeit consumption unlike other cultural dimensions, such as power distance or masculinity (Bian and Veloutsou, 2007; Santos and Ribeiro, 2006). Hence, we expect these four PCOs to explain most of the variance in the impact of culture on the linkages in the deliberate counterfeit purchase framework.

Independence (IND): Independence is defined as “acting independently, strong self-concept, sense of freedom, autonomy, and personal achievement” (Sharma 2010; p.790). It is similar to other cultural values such as competence (Bond, 1988), individualism and achievement (Trompenaars, 1993), self-direction and hedonism (Schwartz, 1994), and autonomy (Steenkamp, 2001). Prior research shows that cultural factors may not only directly affect customer attitudes, perceptions and evaluations but they also moderate the relationships among these variables (Sharma, 2011a, b; Sharma, Chen and Luk, 2012; Sharma, Sivakumaran and Marshall, 2014).

Past research on counterfeit consumption shows that customers from individualistic cultures are less likely to buy pirated software than those from collectivistic cultures (Husted, 2000); however, it does not offer any theoretical explanation for this. Consumers with higher scores on independence are less likely to care about the impact of their decisions on others

(Sharma, 2010; Steenkamp, 2001; Sun et al., 2014); hence, when coupled with high scores on counterfeit proneness, they are likely to consider buying counterfeit products for themselves as not being unethical. Thus, we hypothesize a stronger positive effect of counterfeit proneness on ethical judgement about buying counterfeit products for those with higher independence. We also hypothesize this bias in their ethical judgments to result in a stronger positive influence on their evaluation and purchase intentions for counterfeit products. In contrast, consumers with lower scores on independence are more likely to be influenced by the subjective norms of others (Sharma, 2010; Steenkamp, 2001; Sun et al., 2014), which we hypothesize to weaken the effect of counterfeit proneness on their subjective norms and on their evaluation and purchase intentions for counterfeit products. Thus, we hypothesize consumers with high counterfeit proneness and low independence to have unfavorable subjective norms, evaluation and purchase intentions towards counterfeit products.

Interdependence (INT): Interdependence is defined as “acting as a part of one or more in-groups, a strong group identity, a sense of belongingness, reliance on others, giving importance to group-goals over own individual goals, and collective achievement” (Sharma 2010; p.790). Interdependence is associated with values such as benevolence, tradition, and conformity (Schwartz et al., 2001) and is similar to cultural inwardness, social reliability and morality (Bond, 1988), benevolence and conformity (Schwartz, 1994), and universalism (Smith, Dugan and Trompenaars, 1996). People with higher scores on interdependence identify themselves as inseparable part of their in-groups and are willing to give priority to the goals of these in-groups over their own goals.

Consumers with higher scores on interdependence are more likely to care about the impact of their decisions on others (Sharma, 2010; Steenkamp, 2001; Sun et al., 2014); hence, even when coupled with high scores on counterfeit proneness, they are likely to consider buying counterfeit products for themselves as being unethical. Thus, we hypothesize

a weaker positive effect of counterfeit proneness on ethical judgement about buying counterfeit products for those with higher scores on interdependence. We also expect this bias in their ethical judgments to result in a stronger negative influence on their evaluation and purchase intentions for counterfeit products. Consumers with higher interdependence are also more likely to be influenced by the subjective norms of others (Sharma, 2010; Steenkamp, 2001; Sun et al., 2014); hence, we hypothesize a stronger positive effect of counterfeit proneness on subjective norms, evaluation and purchase intentions for counterfeit products.

Risk aversion (RSK): Risk aversion (RSK) is defined as the “extent to which people are reluctant to take risk or make risky decisions” because they feel threatened by ambiguous or unknown situations (Sharma 2010; p.791). High risk averse people are more likely to avoid taking risks in any situation and prefer predictability, written explicit rules and structured situations (Hofstede, 2001). They also tend to be relatively more contemplative, less emotional or risk-takers, with a greater need to control the environment, events and situations in their lives. In contrast, low risk averse people are generally more active, emotional, and security-seekers, likely to accept uncertainty without much discomfort, and they show greater tolerance for opinions and behaviors different from their own (Triandis, 1999).

Prior research shows that customers with higher scores on uncertainty avoidance focus more on subjective aspects of their experiences (Furrer et al., 2000) and have narrower zones of tolerance (Reimann et al., 2008). Consumers with high risk aversion are also more likely to be concerned about the impact of their decisions on themselves and on others (Sharma, 2010; Steenkamp, 2001; Sun et al., 2014). Hence, we hypothesize consumers with high risk aversion to also evaluate counterfeit products more strictly and thus, not allow their own counterfeit proneness to influence their ethical judgement and subjective norms about buying counterfeit products to the same extent as those with lower risk aversion. We also hypothesize ethical judgments and subjective norms of consumers with high risk aversion to

have a weaker impact on their counterfeit products evaluation and purchase intentions, compared to the consumers with low risk aversion.

Ambiguity Intolerance (AMB): Ambiguity intolerance is defined as the “degree to which people can tolerate ambiguity and uncertain situations” (Sharma 2010; p.791), which is different from but related to the tendency to avoid taking risks or uncertainty (Grenier et al., 2005). Customers with higher intolerance for ambiguity evaluate products imported from other countries unfavorably because of ambiguous signals about their quality (Sharma, 2010), are less satisfied when their service expectations are not met and have narrower zones of tolerance (Reimann et al., 2008). We argue that consumers with higher scores on ambiguity intolerance are also more likely to be concerned about the ambiguous signals about the quality of counterfeit products; hence, we hypothesize a weaker positive effect of counterfeit proneness on both ethical judgement and subjective norms about buying counterfeit products for those with higher scores on risk aversion. We also hypothesize this bias in their ethical judgments and subjective norms to lead to a stronger negative influence on their evaluation and purchase intentions for counterfeit products. Table 1 summarizes all the hypotheses.

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Methodology

We used a team of trained undergraduate helpers to conduct a field-survey in Hong Kong because of the popularity and widespread availability of counterfeit goods there and in nearby mainland Chinese cities (Cheung and Prendergast, 2006a, b; Harvey and Walls, 2003). Hong Kong is not only an entry port for China, which is a major producer as well as consumer of counterfeit products (Yao, 2006) but also a multicultural society with people from all parts of the world (By-census, 2016), which provides a wide range of personal cultural orientations and makes it a suitable location for this study. We intercepted about 2000 shoppers across all

major shopping areas in Hong Kong and collected 840 completed questionnaires, resulting in a response rate of about 42%, which is quite high for similar mall-intercept surveys (Bush and Hair Jr., 1985). We gave a HK\$ 20 fast-food coupon as incentive to all the participants.

We adapted existing scales to operationalize all the constructs used in this study, namely six-item counterfeit proneness scale (Sharma and Chan, 2011), four-items subject norms and ethical judgments scales (Sharma 2016), four-item product evaluation and two-item purchase intentions scales (de Matos et al., 2007) and six-item independence, interdependence, risk aversion and ambiguity intolerance scales (Sharma 2010), with seven-point Likert-type response format for all scales (ranging from 1 = strongly disagree to strongly agree), except purchase intentions (1 = very unlikely to 7 = very likely). We also recorded demographic variables, namely ethnicity, age, gender, education, and occupation as well as behavioral variables, including past purchase and frequency of purchase of counterfeit products. Our sample is relatively younger and better educated compared to the overall Hong Kong population (By-census, 2016), similar to recent studies (Sharma and Chan, 2011, 2016). Our sample also consists of roughly equal proportions of Chinese and non-Chinese participants, which provides us with sufficient variance in personal cultural orientations.

Data analysis and findings

Using the recommended two-stage process, we first tested the measurement model by conducting confirmatory factor analysis on all the scales using AMOS 6.0 to assess their psychometric properties (Anderson and Gerbing, 1988; Byrne, 2004). The measurement model provided a good fit to the data ($\chi^2 = 1183.73$, $p < .001$; $df = 677$, $\chi^2/df = 1.75$; GFI = .95, CFI = .98, NFI = .96, RMSEA = .029; SRMR = .042) with all the fit indices better than their cut-off values (e.g., RMSEA < .06, SRMR < .08, CFI > .95) according to Hu and Bentler (1999) and ($1 < \chi^2/df < 3$) proposed by Wheaton et al. (1977). Table 2 shows the psychometric properties of all the scale items, including standardized parameter estimates,

squared multiple correlations, mean and standard deviation.

< Insert Table 2 about here >

Since all the parameter estimates (λ) are significantly different from zero at the 5% level, the factors show convergent validity; and none of the confidence intervals of the correlation coefficients for each pair of scales (Φ estimates) includes 1.0, which shows discriminant validity (Anderson and Gerbing, 1988). All the construct reliabilities (.77 to .87) and average variance extracted (AVE) values (.57 to .73) are high, hence all the constructs appear to be reliable (Bagozzi and Yi, 1988). The square root of the AVE and RHOvc values for each construct are higher than its correlations with all other constructs, providing further evidence of discriminant validity (Fornell and Larcker, 1981). For example, independence and interdependence are only moderately correlated ($r = -.32, p < .001$) with each other and the square roots of their AVE values (.76 each) are much higher than their correlations with all the other constructs. Hence, both these constructs are independent of each other. Table 3 summarizes the correlations, reliabilities, AVE values, scale means and standard deviations.

< Insert Table 3 about here >

Next, we tested the structural model for our conceptual framework shown in figure 1, including all the demographic and behavioral variables as covariates to control for their effects. The model provides a good fit to the data ($\chi^2 = 1132.84, p < .001, df = 679, \chi^2/df = 1.67; GFI = .95, CFI = .98, NFI = .96, RMSEA = .027, SRMR = .040$). All the path coefficients are significant and in the expected directions, as shown in Table 4. Specifically, CFP has a positive effect on PI ($\beta = .22, p < .01$), PE ($\beta = .24, p < .01$), SUB ($\beta = .51, p < .001$) and ETH ($\beta = .29, p < .01$); SUB on PE and ($\beta = .42, p < .001$) and PI ($\beta = .36, p < .001$), ETH on PE ($\beta = .21, p < .01$) and PI ($\beta = .13, p < .05$), and PE on PI ($\beta = .43, p < .001$). Thus, all the direct relationships in the unified conceptual framework are supported.

All the control variables have significant effects on the variables in the model, with younger, male, less educated and blue-collar workers as well as past buyers and frequent buyers of counterfeit products showing greater counterfeit proneness, favorable ethical judgments and subjective norms as well as stronger counterfeit product evaluation and purchase intention.

To address concerns about common method bias (CMB), we used Harman's one-factor test to show that a nine-factor model representing all the nine constructs included in our model explained much higher variance (75.88%) than a single factor with all the items (13.69%). In addition, as advised by Lindell and Whitney (2001), we used gender as a marker variable in the marker variable technique. The results of the partial correlation procedure show that the inclusion of gender as a marker variable did not change the hypothesized relationships and their significance. Hence, CMB does not seem to be a concern (Podsakoff et al., 2012). Moreover, our conceptual model consists of several direct and indirect relationships, which further minimizes the possibility of CMB by making it difficult for the respondents to guess the hypothesized relations among the variables (Podsakoff et al., 2012).

< Insert Table 4 about here >

Finally, we tested the moderating effects of the four personal cultural orientations using multi-group SEM models by dividing our sample one-by-one into two groups based on a median-split of the average scores for all the four cultural constructs. We then constrained the estimated parameters for each hypothesized relationship to be the same for both the groups and tested the significance of this constrained model with the unconstrained model. Table 5 highlights all the significant differences in the strength of the hypothesized relationships for all the four personal cultural orientations (independence, interdependence, risk aversion, and ambiguity intolerance). Our finding support most hypothesized moderating effects. Next, we discuss all our findings and their conceptual contribution as well as practical implications.

Discussion and implications

This paper extends the unified conceptual framework for deliberate counterfeit purchase behavior introduced by Sharma and Chan (2016) using four personal cultural orientations (independence, interdependence, risk aversion, and ambiguity intolerance) from Sharma's (2010) extension of Hofstede's (2001) national cultural framework. We also contribute to the growing literature on individual-level cultural factors (Lee and Brislin, 1998; Sharma, 2010; Yoo et al., 2011) by exploring their role in moderating the relationships among consumer perceptions, evaluations and behavioral intentions in a new context, namely deliberate counterfeit purchase behavior (Sharma and Chan, 2011, 2016, 2017; Zhan et al., 2015). Our study makes an important conceptual contribution by helping explain some mixed findings reported in past research on counterfeit purchase behavior.

First, many past studies report mixed results in the influence of consumer attitudes, subjective norms, and ethical judgments on their counterfeit purchase behavior and intentions (e.g., Ang et al., 2001; Chapa et al., 2006; de Matos et al., 2007; Kwong et al., 2003; Maldonado and Hume, 2005; Penz and Stöttinger, 2005), possibly because they explore the 'direct' effects of these variables and ignore the moderating impact of cultural factors. We address this gap by showing that the influence of these variables on each other may vary based on the differences in their personal cultural orientations (e.g., independence, interdependence, risk aversion, and ambiguity intolerance). For example, consumers with higher scores on independence or lower scores on interdependence have stronger positive effects of counterfeit proneness on ethical judgments and of both these variables on the evaluation and purchase intentions for counterfeit products. In contrast, those with higher scores on interdependence or lower scores on independence have stronger positive effects of counterfeit proneness on subjective norms and of both these variables on the evaluation and purchase intentions for counterfeit products. Interestingly, consumers with higher scores on

risk aversion or ambiguity intolerance exhibit significant negative moderating effects on most of the relationships among all these variables.

Second, most past studies explored counterfeit purchase behavior either in only one or more randomly chosen categories, which may have also restricted the generalizability of their findings. Our findings may help resolve these inconsistencies by showing that the impact of subjective norms varies significantly based on consumers' personal cultural orientations, wherein those with higher scores on interdependence and those with lower scores on independence have stronger positive effects of counterfeit proneness on subjective norms and of both these variables on the evaluation and purchase intentions for counterfeit products. Similarly, consumers with higher scores on risk aversion and ambiguity intolerance show negative moderating effects of counterfeit proneness on subjective norms and of both these variables on counterfeit product evaluation and purchase intentions. Therefore, future studies may need to incorporate these personal cultural orientations along with interpersonal or social influence constructs to provide a fuller picture of their effects.

Third, some studies show a higher preference for counterfeit purchase in utilitarian (vs. hedonic) products (Maldonado and Hume, 2005) but others found no such difference (e.g., Chapa et al., 2006; Wee et al., 1995). Similarly, some studies found more frequent counterfeit consumption for products used in public (vs. private) (Chapa et al., 2006) while others predicted the opposite (Gentry, Putrevu and Shultz, 2006). Our results show that one reason for these mixed findings could be that most studies ignored cultural differences in the influence of ethical judgments or subjective norms (e.g., de Matos et al., 2007; Parthasarathy and Mittelstaedt, 1995; Penz et al., 2009) or focused only on the ethical aspects while ignoring their relationships with individual characteristics (e.g., counterfeit proneness) and socio-normative influences. As a result, most of these studies might not have provided a full picture of the consumer decision-making process underlying deliberate counterfeit purchase

behavior, a gap addressed in this paper, by exploring the moderating effects of four personal cultural orientations (independence, interdependence, risk aversion, and ambiguity intolerance) on the relationships among counterfeit proneness, subjective norms, ethical judgments, counterfeit product evaluation and purchase intentions.

Finally, we did not find support for many of our hypothesized moderating effects. For example, subjective norms show a significant difference in its impact on counterfeit product evaluations only between low and high levels of independence and none of the other three PCOs. We argue that due to the prevalence of Chinese culture in Hong Kong society, most people in Hong Kong are likely to be influenced by interdependence, risk aversion, and ambiguity intolerance in their day-to-day behaviors irrespective of their own personal cultural orientations. However, unlike the other three PCOs, independence is likely to be more salient and hence, the differences in the impact of subjective norms are more likely to be visible across differences in the level of independence compared to the other three PCOs. We also find significant differences in the effects of counterfeit proneness on ethical judgments only for risk aversion and ambiguity intolerance and not for independence or interdependence. We argue that due to the importance of saving face and respect in the eyes of others in Hong Kong, counterfeit proneness is more likely to manifest itself across risk aversion and ambiguity intolerance due to their association with greater perceived social risk with the purchase and usage of counterfeits rather than independence and interdependence.

Besides the above conceptual contributions, our study also has important managerial implications, particularly for manufacturers and retailers of genuine brands that suffer the most due to counterfeiting. First, they can use our findings to understand the differences in the impact of personal cultural orientations of their customers in different parts of the world, which goes beyond the influence of demographic and behavioral variables. For example, we finding that consumers with high scores on interdependence and low scores on independence

are more likely to be influenced by subjective norms on their counterfeit evaluations and purchase intentions. In contrast, those with high scores on independence and low scores on interdependence are more likely to be influenced by their ethical judgments. Marketers of genuine brands can use these findings to develop suitable promotional or preventive strategies using advertising appeals based on independence vs. interdependence values.

Second, we find that consumers with higher scores on risk aversion and ambiguity intolerance are more constrained in the influence of subjective norms and ethical judgments on their counterfeit evaluations and purchase intentions. Once again, genuine brands marketers can use these findings to create suitable communication and promotions wherein they increase the perceived risk and ambiguity about the quality of counterfeit versions of their genuine brands, to dissuade the consumers from purchasing and using counterfeits.

Finally, we find that younger, male, less educated and blue collar workers, especially those who are past buyers and frequent buyers of counterfeit products show higher levels of counterfeit proneness, favorable ethical judgments and subjective norms as well as stronger counterfeit product evaluation and purchase intention. We suggest that public policy makers and regulatory agencies may use these findings to identify consumer segments with higher levels of counterfeit proneness and more favorable ethical judgments and subjective norms about buying counterfeit products so that they can target them specifically through their anti-counterfeiting and anti-piracy campaigns to reduce overall counterfeit purchase and usage.

Limitations and future research

Our research makes several useful contributions, but it also has a few limitations, which future research may address. First, we use data from consumers with diverse personal cultural orientations but Hong Kong is predominantly Chinese in culture. Hence, future research may use data from other countries around the world with more diverse cultural values to test the

generalizability of our findings. Second, we counterfeited proneness as an individual psychographic antecedent of the attitudes, subjective norms, and ethical judgments about buying a counterfeit product based on the conceptual framework introduced by Sharma and Chan (2016). Hence, future research may include other variables such as innovativeness, risk-taking and change seeking, to explore their influence on counterfeit purchase behavior and consumption. Third, we used four personal cultural orientations as moderators of the relationships included in the conceptual framework developed by Sharma and Chan (2016) but future research could explore the impact of other potential moderators, such as cultural values, ethnic identity and cultural distance. Finally, we study consumer perceptions and evaluations towards counterfeit products in general and not for any specific product category. Future research may further extend our conceptual framework for deliberate counterfeit purchase behavior by incorporating product characteristics such as involvement level, purchase motivation (hedonic vs. utilitarian), and consumption context (private vs. public) to study differences in their effects across diverse product categories.

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Figure 1: Unified conceptual framework (Sharma and Chan, 2016)

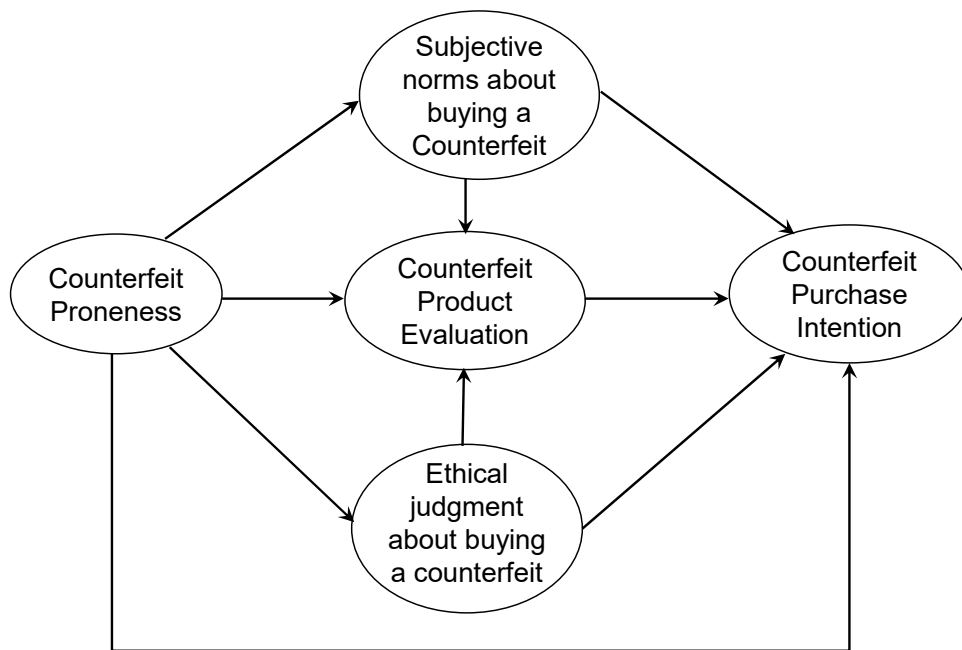


Table 1: Hypotheses Summary

	<u>Overall</u>	<u>Independence</u>		<u>Interdependence</u>		<u>Risk Aversion</u>		<u>Ambiguity Intolerance</u>	
	B	Low	High	Low	High	Low	High	Low	High
Counterfeit proneness → Purchase Intentions	+	+	++	++	+	++	+	++	+
Counterfeit proneness → Product Evaluation	+	+	++	++	+	++	+	++	+
Counterfeit proneness → Subjective Norms	+	++	+	+	++	++	+	++	+
Subjective Norms → Product Evaluation	+	++	+	+	++	++	+	++	+
Subjective Norms → Purchase Intentions	+	++	+	+	++	++	+	++	+
Counterfeit proneness → Ethical Judgments	+	+	++	++	+	++	+	++	+
Ethical Judgments → Product Evaluation	+	+	++	++	+	++	+	++	+
Ethical Judgments → Purchase Intentions	+	+	++	++	+	++	+	++	+
Product Evaluation → Purchase Intentions	+	+	++	++	+	++	+	++	+

Note: + sign denotes a positive effect and number of + signs denote the strength of these effects.

Table 2: Scale Items (Psychometric Properties)

<i>Scale Items (Source)</i>	<i>λ</i>	<i>α</i>	<i>M</i>	<i>SD</i>
<i>Counterfeit Proneness</i>				
1. Buying counterfeit products makes me feel good.	.82	.67	3.98	1.45
2. I feel excited when buying counterfeit products.	.86	.74	3.79	1.52
3. When I buy counterfeit products, I feel that I am getting a good deal.	.87	.76	3.86	1.56
4. I enjoy buying counterfeits, regardless of the money I save by doing so.	.78	.62	3.63	1.48
5. Many of the branded products that I have are counterfeits.	.76	.61	3.38	1.42
6. Counterfeits enable me to own brands that I normally would not buy.	.73	.54	3.75	1.60
<i>Subjective Norms</i>				
7. I think no one will mind if I buy this counterfeit product.	.83	.70	3.73	1.52
8. I think everyone will consider it a smart decision if I buy this counterfeit product.	.87	.76	3.33	1.50
9. I think everyone would like me to buy this counterfeit product.	.91	.83	3.26	1.49
1. I think no one will have any hesitation in buying this counterfeit product.	.80	.66	3.18	1.47
<i>Ethical Judgments</i>				
11. I think buying this counterfeit product would be immoral.*	.83	.70	4.36	1.42
12. I think buying this counterfeit product would be unethical.*	.89	.81	4.35	1.40
13. I think buying this counterfeit product would be illegal.*	.75	.57	4.56	1.52
14. I think buying this counterfeit product would be wrong.*	.80	.64	4.46	1.45
<i>Product Evaluation</i>				
15. I think this counterfeit product looks as good as a genuine product.	.87	.76	3.62	1.54
16. I think this counterfeit product will work as good as a genuine product.	.91	.83	3.63	1.52
17. I think this counterfeit product will last as long as a genuine product.	.86	.75	3.55	1.59
18. I think it will be hard to distinguish this counterfeit product from a genuine product.	.77	.60	3.97	1.53
<i>Purchase Intentions</i>				
19. I would definitely buy this counterfeit product.	.83	.70	4.07	1.53
20. After looking at this counterfeit product, I would still prefer the genuine one.*	.77	.60	4.27	1.49

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<i>Scale Items (Source)</i>	λ	α	<i>M</i>	<i>SD</i>
<i>Independence</i>				
21. I would rather depend on myself than others.	.77	.61	5.07	1.48
22. My personal identity, independent of others, is important to me.	.71	.52	5.05	1.33
23. I rely on myself most of the time, rarely on others.	.78	.63	4.92	1.37
24. It is important that I do my job better than others.	.76	.60	5.23	1.22
25. I enjoy being unique and different from others in many respects.	.77	.61	5.14	1.22
26. I often do 'my own thing'.	.72	.54	4.79	1.34
<i>Interdependence</i>				
27. The well-being of my group members is important for me.	.70	.51	5.15	1.11
28. I feel good when I cooperate with my group members.	.80	.65	5.35	1.12
29. It is my duty to take care of my family members, whatever it takes.	.77	.64	5.75	1.20
30. Family members should stick together, even if they do not agree.	.77	.63	5.60	1.25
31. I enjoy spending time with my group members.	.80	.66	5.25	1.14
32. We must respect the views of our group members.	.73	.53	5.37	1.16
<i>Risk Aversion</i>				
33. I tend to avoid talking to strangers.	.76	.61	3.91	1.48
34. I prefer a routine way of life to an unpredictable one full of change.	.79	.68	4.33	1.51
35. I would not describe myself as a risk-taker.	.78	.62	4.46	1.48
36. I do not like taking too many chances to avoid making a mistake.	.84	.70	4.27	1.45
37. I am very cautious about how I spend my money.	.75	.62	4.66	1.42
38. I am seldom the first person to try anything new.	.77	.63	4.24	2.83
<i>Ambiguity Intolerance</i>				
39. I find it difficult to function without clear directions and instructions.	.78	.62	4.63	1.41
40. I prefer specific instructions to broad guidelines.	.71	.55	4.80	1.37
41. I tend to get anxious easily when I do not know an outcome.	.82	.68	4.73	1.29
42. I feel stressful when I cannot predict consequences.	.79	.64	4.78	1.30
43. I feel safe when I am in my familiar surroundings.	.78	.62	5.37	1.16
44. I get confused easily when dealing with complex problems.	.76	.60	4.66	1.34

Note: λ = Standardized parameter estimates; α = Squared multiple correlations; *M* = Mean; *SD* = Standard Deviation; * Reverse-worded items

Table 3: Correlations Matrix

	CFP	SUB	ETH	PE	PI	IND	INT	RSK	AMB
Counterfeit Proneness (CFP)	.80								
Subjective Norms (SUB)	.32***	.85							
Ethical Judgments (ETH)	.19**	.03	.82						
Product Evaluation (PE)	.30**	.53***	.01	.85					
Purchase Intentions (PI)	.02	.07	.12**	.03	.80				
Independence (IND)	.16**	-.34***	.29***	.34***	.26***	.76			
Interdependence (INT)	-.29***	.46***	-.22**	-.27**	-.23**	-.32***	.76		
Risk Aversion (RSK)	-.22**	.34***	-.18**	-.22**	-.18**	-.25**	.24**	.78	
Ambiguity Intolerance (AMB)	-.16*	.20**	-.21**	-.24**	-.13*	-.23**	.16**	.22**	.77
Mean (M)	3.73	3.38	4.43	3.69	4.17	5.03	5.41	4.31	4.83
Standard Deviation (SD)	1.51	1.50	1.45	1.55	1.51	1.33	1.16	1.70	1.31
Construct Reliability (CR)	.82	.87	.83	.86	.81	.78	.77	.80	.79
Average Variance Extracted (AVE)	.65	.73	.67	.73	.64	.57	.58	.61	.60

Note: Figures in diagonal represent square roots of average variance extracted (AVE)
** p < .05; ** p < .01; *** p < .001*

Table 4: Structural Model (Path Coefficients)

	<u>Overall</u>	<u>Independence</u>		<u>Interdependence</u>		<u>Risk Aversion</u>		<u>Ambiguity Intolerance</u>	
	B	Low	High	Low	High	Low	High	Low	High
CFP → PI	.22**	.09(ns)	.35***	.35***	.09(ns)	.30***	.15*	.28**	.17*
CFP → PE	.24**	.12*	.34***	.36**	.12*	.36***	.11*	.35***	.16*
CFP → SUB	.51***	.58***	.42***	.43***	.58***	.58***	.44***	.56***	.42***
SUB → PE	.42***	.62***	.26**	.37***	.47***	.46***	.36***	.44***	.38***
SUB → PI	.36***	.44***	.30***	.28**	.43***	.45***	.33***	.44***	.28**
CFP → ETH	.29**	.25**	.35***	.32***	.26**	.38***	.20**	.36***	.22**
ETH → PE	.21**	.12*	.33**	.28**	.12*	.34***	.08(ns)	.31***	.12*
ETH → PI	.13*	.08(ns)	.15*	.16*	.09(ns)	.17**	.09(ns)	.22**	.04(ns)
PE → PI	.43***	.28**	.57***	.51***	.39***	.49***	.36***	.51***	.37***

*Note: Figures in bold are significantly higher than the adjacent ones for the different level of the same moderator variable.
* $p < .05$; ** $p < .01$; *** $p < .001$*