

A Study of University Students' Purchasing Decision Behaviors for Counterfeit Sport Shoes

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Abstract—Based on the Engel-Kollat-Blackwell model of consumer behaviors, this study aimed to understand university students' consumer decision-making patterns for counterfeit sport shoes, including the effect of needs (functional needs, symbolic needs, and experiential needs), information search, price, brand awareness, and the price-performance ratio on repurchase intentions. This study adopts a convenient sampling method to investigate university students who have purchased counterfeit sport shoes. A total of 234 valid questionnaires were collected. The results of the partial least squares (PLS) analysis showed that the university students, searched for product information when having the functional needs and symbolic needs for sport shoes. This study shows that after students have conducted a product search, the price, brand awareness, and price-performance ratio affected them repurchase intentions. The findings of this study could provide a reference for practical actions to resist counterfeit sport shoes.

Keywords—counterfeits, sport shoes, brand, decision behavior, price, consumer behavior, price-performance ratio, repurchase intention

I. INTRODUCTION

Some Chinese think that counterfeiting is a fraudulent act that seriously damages social justice and affects product quality. It has adverse effects on research and development (R&D), intellectual property, social integrity, industrial development, and tax systems [1]. However, the problem of counterfeits remains. Among the many different counterfeits, sport shoes are the most attractive for university students. Sport shoes from internationally renowned brands are expensive, and students have limited financial resources. Therefore, they turn to counterfeit sport shoes. The main problem with counterfeits is that they not only look similar to the original and have the same logo, but also look the same as the original and have the same perceived quality [2]. There are three distinct types of counterfeits, namely, high-quality counterfeits; low-quality counterfeits; and lookalikes or knockoffs [3]. Different types of counterfeits have different prices but mainly meet the needs of materialistic consumers in a low-price way.

Consumers' counterfeit purchase behavior has aroused the attention of researchers, especially regarding the study of luxury goods [4]. The impact of materialism is a powerful driver of luxury consumption [5]. In recent years, scholars have used different academic perspectives and variables to study counterfeit purchase behaviors. For example, Orth, Hoffmann, and Nickel [6] studied such behaviors from the perspective of moral decoupling. Chand and Fei [7] studied the relationship between consumers' self-brand connections

and the intention to purchase counterfeit luxury brands in emerging economies. Sharma, Chan, Davcik, and Ueno [8] analyzed the moderating effects of four personal cultural orientations (independence, interdependence, risk aversion, and ambiguous intolerance) on the relationships among counterfeit proneness, subjective norms, ethical judgments, product evaluations, and purchase intentions for counterfeits. For young people, especially students, designer sport shoes are like luxury goods. Due to the high price, most of them cannot afford to purchase them. Therefore, they turn to counterfeit sport shoes [6]. In addition, due to the convenience of online purchasing platforms, some unscrupulous merchants have also allowed consumers with needs to easily purchase counterfeits amid the development of e-commerce [9]. Therefore, this study investigated the purchasing needs of university students, how they obtain product information when they have purchase intentions, how they evaluate alternatives, and how the alternatives affect them repurchase intentions. The results of this study can provide a reference for the government and practitioners in resisting the negative impact of counterfeit sport shoes on the market.

II. RELEVANT LITERATURE, AND RESEARCH HYPOTHESES

A. Problem Recognition

According to the purchase decision in the EKB model proposed by Engel, Kollat, and Blackwell [10] and the purchase decision process proposed by Kotler [11], the needs of consumers are the starting point of all purchasing decisions. After identifying a need, consumers will search for product information. Many researchers have proposed determinants of counterfeit purchase intention, including product characteristics, such as price and product type [12], brand characteristics [13], and personal values [14]. In terms of purchasing drivers, Eisend, Hartmann, and Apaolaza [15] used meta-analysis to analyze the psychological factors affecting counterfeit luxury purchases, including fashion seeking, innovativeness, integrity, materialism, risk aversion, self-concept, status seeking, smart shopping, and susceptibility. Djuhardi and Kusumawati [16] found that brand image has a significant impact on attitudes toward counterfeits. Qin *et al.* [17] studied shanzhai imitation and consumers' purchasing drivers, and found that social value, personal value, functional value, and financial value are the main motivational factors for consumers to purchase copycat products. Chand and Fei [7] conducted a survey on the possible counterfeit purchases by people in nine shopping

malls in Shanghai, Shenzhen, and Guangzhou in China. They found that conspicuous consumption and emotional attachment are the intermediaries between the self-brand connection and the intention to purchase counterfeit luxury brands, and that consumers eager to build their self-concept may decide to purchase counterfeit luxury brands. Park, Jaworski, and MacInnis [18] put forward the three main needs of consumer brand image, namely, functional needs, symbolic needs, and experiential needs, which can be regarded by researchers as the three main variables of brand image [19]. Functional needs are seen as a consumer's motivation of searching products for fixing the problems related to their consumption. Symbolic needs are defined as the desires for products to fulfill a role of social approval such as, self-enhancement, role position, group membership, or self-identity. Experience needs is defined as desires for products to offer sensory pleasure, different responses, and cognitive activities [18, 19]. Based on the above three variables, consumers will begin to search for product information on counterfeit sport shoes after creating the need to purchase counterfeit sport shoes. Therefore, the following three hypotheses were proposed:

H1: When having the need to purchase counterfeit sport shoes, university students search for information on whether counterfeit sport shoes can meet their functional needs.

H2: When having the need to purchase counterfeit sport shoes, university students search for information on whether counterfeit sport shoes can meet their symbolic needs.

H3: When having the need to purchase counterfeit sport shoes, university students search for information on whether counterfeit sport shoes can meet their experiential needs.

B. Information Search

In terms of the information search, first of all, according to the consumer socialization theory (CST), parents, peers, and mass media play an important role in the socialization process of consumers [20]. University students will consult friends and relatives, read reviews on social networking platforms, and browse reviews from consumers who have purchased counterfeit sport shoes. With the popularity of the Internet, it is becoming increasingly important for consumers to use e-word-of-mouth (eWOM) as a source of consumer references when making consumer decisions [21]. eWOM refers to personal communication online or through social media, as well as positive or negative statements about a product or company [22]. eWOM is not only seen as an important factor in participating in online communities but also influences consumer purchase intention [23]. During online communication on social networking sites, peer opinions are seen as helpful in obtaining information and evaluating products [24]. Attitudes toward products are formed through peer communication, which also influences purchase intentions [25]. Tung [26] studied the attitudes of Taiwanese consumers toward Chinese brands. Chinese products often have a high price-performance ratio (high performance and low price), and Chinese shopping websites often have a review function. He found that many of the study respondents, after the change in attitude, said that they would read reviews on the Internet or follow friends' advice to purchase Chinese products before purchasing Chinese brands. Chen and Wang [27] studied consumers' purchasing

attitudes toward shanzhai imitation products from Shanghai and found that price has a positive impact. Bupalan, Rahim, Ahmi, and Rahman [28] used the theory of planned behavior to study consumers' behavioral intention to repurchase counterfeits. They found that brand image has a mediating effect on consumers' behavioral intention to repurchase counterfeits, and that price is still an important motivating factor for counterfeit buyers [29]. Lu [30] studied the motivation and attitude of Taiwanese consumers to purchase sports brands produced in mainland China. Lu found that before consumers make a purchase decision, the price, need for uniqueness, brand spokesperson, and consumers' early adopter mentality will affect consumers' purchase intention before purchasing Chinese sports brands. Based on the above analysis, this study proposed the following three hypotheses:

H4: After university students search for information on counterfeit sport shoes, product price is an important consideration in the evaluation of their purchasing behavior.

H5: After university students search for information on counterfeit sport shoes, brand awareness is an important consideration in the evaluation of their purchasing behavior.

H6: After university students search for information on counterfeit sport shoes, the price-performance ratio is an important consideration in the evaluation of their purchasing behavior.

C. The Effect of Price, Brand Awareness, and Price-Performance Ratios on Repurchase Intention

Purchase intention refers to a consumer's propensity to purchase a particular product or service in the future [31]. An existing study highlighted that price, especially the monetary advantage of a counterfeit over the original, is an important predictor of counterfeit purchases [15]. For some consumers, the price difference between the original and the counterfeit may even represent a factor in deciding to purchase [32]. In an empirical study, Orth, Hoffmann, and Nickel [6] also found that the price advantage of a counterfeit affects consumers' purchase intentions. For example, Kassim *et al.* [4] found that quality, price, popularity, and status symbols are the main motivations for customer groups in Malaysia and Saudi Arabia to choose counterfeit luxury goods. Luxury goods are expensive because they are recognized and respected by everyone. Therefore, most consumers purchase luxury products to convey symbolism [33]. However, individuals who purchase counterfeits do not always perceive counterfeits as being inferior [34]. It has been pointed out that brand awareness and channels will affect consumers' intention to purchase Chinese sports brands when making purchasing decisions [30]. Zhou *et al.* [35] found that the use of sports stars' personal brands (attractiveness, expertise, and congruence) is positively related to global brand equity and brand affection, meaning consumers will choose to purchase celebrity-endorsed brand sport shoes. Lu [30] pointed out that the peer influence caused by social groups, herd behavior, and the price-performance ratio will affect consumers' intentions to repurchase Chinese sports brands. Based on the above analysis, this study proposed the following three hypotheses:

H7: The price of counterfeit sport shoes has a positive effect on university students repurchase intention.

H8: The brand awareness of counterfeit sport shoes has an effect on university students repurchase intention.

H9: The price-performance ratio of counterfeit sport shoes has an effect on university students repurchase intention.

III. METHOD

A. Subjects and Sampling

This study focuses on Chinese university students who have previously purchased counterfeit sport shoes. Due to the current sales of counterfeit sport shoes, most transactions are conducted through online shopping, so there are no physical stores to investigate consumers. Therefore, with the assistance of students who have sold counterfeit sport shoes online stores, the researchers invited university students with purchasing experience to fill out a questionnaire in the online discussion of counterfeit sport shoes social group, and collected a total of 234 valid questionnaires. Among the valid samples, there were 159 (67.9%) males and 75 (32.1%) females. They come from 13 provinces in China, with 78 students making their first purchase and 45 students making more than 6 purchases. The main brands purchased are Nike, Adidas, and New Balance.

B. Questionnaire Design

The questionnaire was divided into six parts. Part 1 was the price scale and included five questions. The main purpose was to understand university students' feelings about the price of counterfeit sport shoes, including the price being lower than the price of the authentic product, and being in line with their financial ability, expectations, affordability, and reasonableness. This scale was prepared based on the researcher's actual interviews with students who had purchased counterfeits as well as the experiences of netizens shared on social networking platforms.

Part 2 was the scale for the brand image needs of counterfeit sport shoes and included three factors and nine questions. The main purpose was to understand university students' feelings about the functional image (appearance designs, durable materials, and ergonomics), symbolic image (personal image, positive images, and desired style), and experiential image (need for practicality, pleasure, and diversification) of counterfeit sport shoes. This scale was prepared mainly with reference to the three main needs of consumer brand image, namely, functional needs, symbolic needs, and experiential needs, as proposed by Park, Jaworski, and MacInnis [18]. The wording of the items was modified to fit the context of this study.

Part 3 was a brand awareness scale and included five questions. The main purpose was to understand the reasons for consideration by university students who want to purchase counterfeit sport shoes, including well-known brands, celebrity or star endorsements, good quality, affordable prices, and individual needs. This scale was prepared mainly with reference to the items of the study by Jina and Shan [36] on counterfeit or shanzhai brand awareness and the related study on sport shoes purchasing behaviors of Zhou *et al.* [35]. The wording of the items was modified to fit the context of this study.

Part 4 was the information search scale and included five

questions. The main purpose was to understand whether university students ask others for opinions before considering purchasing counterfeit sport shoes and communicate with others to obtain more information about counterfeit sport shoes. This scale was prepared mainly with reference to the peer communication scale developed by Wang *et al.* [25] and the word-of-mouth scale developed by Bhattacharya, Srivastava, and Verma [37] to study the impact of social media peer communication on purchase intention. Furthermore, the electronic word of mouth of netizens regarding counterfeit sport shoes was independently collected from the Internet by the researcher (social platforms, spaces, and discussion boards).

Part 5 was the price-performance ratio scale and included three questions. The main purpose was to understand whether university students, before considering purchasing counterfeit sport shoes, consider such items are worth purchasing after comparing them with previously purchased sport shoes, whether the price is cheap, and whether the purchased sport shoes are not so different from the original. This scale was prepared mainly with reference to Lu's [30] study on consumer purchases of Chinese-made sport shoes and the results of Tung's [26] consumer study on Chinese brand products.

Part 6 was the repurchase intention scale and included three questions. The main purpose was to understand the plan of university students who want to purchase counterfeit sport shoes, as well as the brands they want to purchase. This scale was prepared mainly by referring to the research scale developed by Ting, Goh, and Isa [5] to study counterfeit purchase intentions. The wording of the items was modified to fit the context of this study. The final part was the student's basic personal information, including gender and grade.

C. Data Analysis

This study conducted the statistical analysis using the following two tools. 1). SPSS for Windows 21.0 software was employed to analyze the distribution and percentage of statistics, as well as the distribution of the background variables of students. 2). Warp PLS 8.0 statistical software was used for the partial least squares (PLS) statistical method to analyze the functional needs, symbolic needs, experiential needs, information search, price, brand awareness, the price-performance ratio, purchase intention, as well as to test the hypotheses. The composite reliability (CR) and Cronbach's α were used to determine reliability and validity, and both needed to be equal to or greater than 0.70 [38]. Validity was based on whether the factor loading was up to .50, and all latent variable amounts of the average variation extraction (AVE) needed to be equal to or greater than .50 to determine whether the latent variables had convergent validity [39]. In terms of discriminant validity, the inspection method puts forward the individual latent variables of extracting the square root of the average variance, which should be greater than the latent variables and other latent variables in the model of covariant relations. In addition, Venkatesh, Thong, and Xu [40] suggested that the test standard of the AVE square root should be at least greater than or equal to .70. The model relationship analysis depends on: 1) whether the standardized path coefficient reaches

statistical significance; and 2) the interpretation ability of the model in R^2 [38, 39].

IV. RESULTS

A. Reliability and Validity Analysis

1) Confirmatory factor analysis

From the analysis results of Table 1, the composite reliability (CR) of the eight latent variables of the scales in this study reached more than 0.80. Except for the Cronbach's α of the price-performance ratio (0.65, close to 0.7), the Cronbach's α values of the variables were higher than 0.70. Therefore, the reliability of each scale in this study was acceptable. In terms of the validity, from the analysis results, the factor load of each observed variable in this study was higher than 0.60. Except for the AVE of brand awareness (0.47, slightly lower than 0.50), the AVE of each latent variable was higher than 0.50, indicating that all latent variables had good convergent validity. Because of the five items of brand awareness, the factor loading of each item is above 0.70, and according to Fornell and Larcker [38] pointed out that when the AVE is lower than 0.5, if the CR of the factor is higher than 0.6, still has convergent validity, so this factor is retained in this study.

Table 1. Confirmatory factor analysis results

Latent variables	CR	Cronbach's α	AVE
Price	0.90	0.86	0.65
Functional needs	0.88	0.81	0.72
Experiential needs	0.89	0.81	0.73
Symbolic needs	0.93	0.88	0.81
Brand awareness	0.93	0.71	0.47
Information search	0.90	0.88	0.81
Price-performance ratio	0.81	0.65	0.59
Repurchase intention	0.93	0.89	0.82

2) Discriminant validity analysis

From the results of Table 2, it could be seen that the square root of the AVE for all latent variables in the scale for students with purchasing experience in this study was between .68 and .91. The value of brand awareness was .68 (close to .70), while the rest were greater than .70. Moreover, the AVE of each latent variable was greater than the value of all relevant coefficients in the same row and the same column. Therefore, the measurement model of this study had good discriminant validity.

Table 2. Discriminant validity analysis

Variables	FN	EN	SN	IS	PR	BA	PPR	RI
FN	0.85							
EN	0.64	0.85						
SN	0.54	0.62	0.89					
IS	0.37	0.34	0.42	0.80				
PR	0.68	0.58	0.48	0.34	0.85			
BA	0.39	0.42	0.48	0.44	0.38	0.68		
PPR	0.39	0.42	0.39	0.55	0.37	0.42	0.77	
RI	0.41	0.44	0.52	0.40	0.42	0.41	0.54	0.91

B. Hypothesis Verification

As shown in Fig. 1, the path coefficients were standardized regression coefficients (β value). First, functional needs ($\beta = 0.18$, $p < 0.01$) and symbolic needs ($\beta = 0.34$, $p < 0.01$) had a

positive effect on information search, but experiential needs had no direct effect on information search ($\beta = 0.04$, $p = 0.26$). Furthermore, information search had a positive effect on price ($\beta = 0.37$, $p < 0.01$), brand awareness ($\beta = 0.46$, $p < 0.01$), and price-performance ratio ($\beta = 0.55$, $p < 0.01$). Price ($\beta = 0.22$, $p < 0.01$), brand awareness ($\beta = 0.17$, $p < 0.01$), and price-performance ratio ($\beta = 0.42$, $p < 0.01$) had a positive effect on purchase intention.

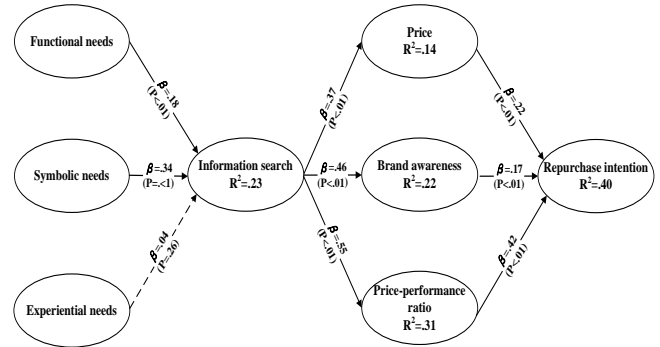


Fig. 1. Analysis results of the structural pattern.

The R^2 represents the predictive power of the research model; that is, it is the percentage of the variables that can be explained by the exogenous variables to the endogenous variables, which represents the predictive power of a research model. A higher value represents stronger predictive power. First, in this study, functional needs and symbolic needs had a predictive power of 23% for information search, it had a predictive power of 14% for price, it had a predictive power of 22% for brand awareness, and it had a predictive power of 31% for the price-performance ratio. The last six latent variables had a predictive power of 40% for purchase intention regarding counterfeit sport shoes.

Table 3. The results of the hypothesis tests

Hypothesis	Path coefficients(β)	Test result
H1: Functional needs → Information search	0.18**	Support
H2: Symbolic needs → Information search	0.34**	Support
H3: Experiential needs → Information search	0.04	No Support
H4: Information search → Price	0.37**	Support
H5: Information search → Brand awareness	0.46**	Support
H6: Information search → Price-performance ratio	0.55**	Support
H7: Price → Repurchase intention	0.22**	Support
H8: Brand awareness → Purchase intention	0.17**	Support
H9: Price-performance ratio → Repurchase intention	0.42**	Support
Model fit indicators: APC = .305 ($p < .001$), ARS = .258 ($p < .001$), AVIF = 1.48 (acceptable if ≤ 5 , ideally ≤ 3.3)		

** $p < 0.01$

Model fit indicators are important in SEM because they offer comparable measurements [41]. WarpPLS calculates three fit indices, which are meaningful in the context of variance-based SEM [42]: the average path coefficient (APC), the average R-squared (ARS), and the average

variance inflation factor (AVIF). The main reason WarpPLS includes APC and ARS is to enable an acceptable comparison between different models, where each path is independently important [41]. However, figures for APC and ARS should both be under 2, and both should be statistically significant ($p < 0.05$); meanwhile, the value for AVIF is suggested to be below 5. The whole model of this study demonstrated an acceptable fit to the data, with APC = 0.305 ($p < 0.001$), ARS = 0.258 ($p < 0.001$), and AVIF = 1.48. Table 3 reports the results of the hypothesis tests.

V. DISCUSSION AND CONCLUSIONS

A. Discussion of the Results and Theoretical Implications

According to the analysis results, eight of the nine hypotheses proposed in this study were supported. First, in terms of needs, this study found that functional needs and symbolic needs were the reasons that promoted the purchase of counterfeit sport shoes by university students. The above results are similar to the results of the study by Qin *et al.* [17]. The drivers of counterfeit purchases were functional, social, and personal values, conspicuous consumption, emotional attachment, and the desire to build a self-concept [7]. Therefore, when the above needs arose, the students would search for information about counterfeit sport shoes. Sport shoes are not considered luxuries, but well-known genuine and high-priced sport shoes are considered luxury goods by students. However, this study found that experiential needs had no effect; that is, the students did not have strong needs for practicality, pleasure, and diversification in terms of the needs for purchasing counterfeit sport shoes. We believe that this situation is caused by the fact that the shoes are counterfeit, the quality is ordinary, the practical value is not high, and the experience and frequency of purchase by students are not much, so the lack of experience in use caused this situation.

Furthermore, this study found that after realizing the functional and symbolic needs of sport shoes, the university students searched for product information about counterfeit sport shoes. In terms of information research, they would consult friends and relatives, as well as browse reviews and word of mouth on social networking platforms [23, 24]. This study summarized the main results of the information search and found that price, brand, and price-performance ratio were the three elements considered by university students when purchasing counterfeit sport shoes.

Consumers purchase counterfeits because they are cheaper and similar to the original, which can meet the needs of consumers [29]. In this study, the researcher's workplace was close to an area known for producing counterfeit and copycat sport shoes. In addition to observing the operation of the practitioners for six years, the researcher interviewed several retailers (including students who acted as retailers) and students who had purchased counterfeit sport shoes. Furthermore, the researcher went online to view the products displayed by retailers on online shopping platforms, exchange and discussion boards, and professional reviews of counterfeit sport shoes. The researcher hence suggested that the opinions of peer groups on social networking platforms would have the greatest impact on whether university

students purchase counterfeit sport shoes. This result is in line with previous studies which found that during online communication on social networking sites, peer opinions are seen as helpful in obtaining information and evaluating products [23, 24]. Based on the analysis results, counterfeits are indeed cheap and have high similarity with the original (well-known brand). Therefore, it does not matter if the counterfeit sport shoes are worn out or if consumers dislike them after purchase. In other words, as long as students have needs, they can purchase counterfeit sport shoes at any time. As counterfeit sport shoes are affordable, students do not need to save up money to purchase them due to the high price of genuine brand sport shoes.

Moreover, it was found that after the university students search for information about counterfeit sport shoes, the price, brand awareness, and price-performance ratio had a positive impact on university students' intention to purchase counterfeit sport shoes. First of all, in terms of price, they considered whether the price of the counterfeit was lower than that of the original, whether the price was reasonable, and whether the price met their expectations, especially whether the price is in line with their financial ability. This study confirmed that price was the main consideration when university students purchased counterfeit sport shoes. This also supported the results of previous studies that found a low price is the reason consumers purchase counterfeits [6]. In addition, when purchasing counterfeit sport shoes, university students considered not only the price but also whether the counterfeit is a well-known brand, whether a celebrity endorsement is used (referring to the original), and whether the product is in line with today's fashion trends. The results of this study and that of Lu [30] confirm that the need for uniqueness and brand spokespersons influences consumers' purchasing decisions before they make a decision to purchase Chinese-made sport shoes. In addition, the results were similar to the findings of Zhou *et al.* [35] that the use of sports stars' personal brands (attractiveness, expertise, and congruence) is positively related to global brand equity and brand affection.

This study revealed an interesting finding regarding price-performance ratios. The researcher found that university students also have the psychology of early adopters when purchasing counterfeit sport shoes. University students try to purchase counterfeit sport shoes because they think they are less different from the original. In other words, there is a psychology of innovativeness (early adopters), which was one of the psychological factors affecting counterfeit luxury purchases analyzed by Eisend, Hartmann, and Apaolaza [43] using meta-analysis. The psychology of innovativeness is similar to counterfeit luxury consumers' main intrinsic motivations for purchasing (such as risk-taking, fashion/novelty, perception of the actual product, and quality acceptance) and the psychology of risk-taking found in the study by Thaichon and Quach [44]. The results of this study were similar to the finding of Lu's [30] study, which found that the price-performance ratio, price, and early adopter mentality affect consumers' purchase intention before making the decision to purchase Chinese-made sport shoes.

Therefore, this study could draw a number of conclusions. First, university students' needs for counterfeit sport shoes

are mainly functional and symbolic needs. When these two needs become stronger, students would begin to search for information about counterfeit sport shoes and evaluate their purchasing behaviors. Second, after searching for information on counterfeit sport shoes, university students mainly consider price, brand awareness, and price-performance ratios, which affect their repurchase intentions. Third, university students who have purchased counterfeit sport shoes have a higher tendency to repurchase them in the future. The main contribution of this study was to provide a mode architecture for studying counterfeit sport shoes consumption, consumption needs, and decision behaviors.

B. Practical Implications

The results of this study showed that the needs of university students for sport shoes are mainly functional needs (appearances, materials, and ergonomics) and symbolic needs (images and styles). However, well-known brand sport shoes are unaffordable for ordinary university students due to their high prices. Sport shoes manufacturers can design and manufacture sport shoes using this aspect to meet the needs of university students and young people. Furthermore, government agencies can be combined to explain the importance of safeguarding intellectual property rights and the harm of counterfeit sport shoes to the development of market economies to online social groups and schools, so as to strengthen the law-abiding concept of university students and young people. In addition, this study found that counterfeits are cheap and not so different from the original, and that university students purchase these items because they will not feel distressed if the counterfeits wear out. Therefore, price, price-performance ratio, and counterfeits of well-known brands are the main factors influencing university students and young people to purchase counterfeit sport shoes. There is a considerable market for sport shoes, but the price factor has also led to the emergence of the market for counterfeits. Therefore, sport shoes manufacturers and sellers need to consider market needs in their product launches and pricings, and they should launch products that can meet the needs of university students and young people. In addition, government agencies can be combined to vigorously crack down on illegal counterfeit manufacturers and sellers (physical stores and online e-commerce) and impose high fines and criminal liabilities, thereby reducing the manufacture and sales of counterfeit sport shoes.

C. Limitations and Future Research

Although this study contributed to theoretical and practical applications, it also had some limitations that can be addressed in future studies. First of all, this study conducted surveys on students who had purchased counterfeit sport shoes. However, the samples were limited to students, and consumers from other social classes were not surveyed. Therefore, it is suggested that future researchers consider distributing questionnaires to people of different ages via online platforms to find out whether they have the need to purchase counterfeit sport shoes. In addition, consumers who have purchased counterfeit sport shoes can be surveyed to

understand their purchase needs, product information sources, main purchase methods, and post-purchase use. In terms of the addition of variables, this study found that experiential needs had no direct effect. This study suggests that future researchers can consider adding the need for popularity in terms of the addition of variables. For those who have purchasing experience, the number of questions can be adjusted or the content of the items can be added to the questionnaire items regarding brand awareness. In terms of influencing purchasing behavior, young people and students are greatly influenced by peers and friends, as found in previous studies on luxury counterfeits [43]. Therefore, future studies can add the influence of the above-mentioned causes.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

H.M. Chang designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. C.H. Lin managed the analyses of the study. All authors had approved the final version.

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