Exploring the Factors Influencing University Students' Choice of Laptop Brand in China

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ABSTRACT

To better understand the factors that influence university students' brand preferences in China, this study was designed. Within the context of this study, independent variables include brand personality, product features, social factors, and product price; the dependent variable is the laptop brand choice behavior. In this investigation, the deductive method was utilised. Survey questionnaires were used to collect primary data that included a Likert scale with 6 points. Participants in the study are college students who work on portable computers. The study used a straightforward sampling method. Primary data were collected using a convenient sampling method with a closed-ended questionnaire. A total of 259 completed and usable responses were received from university student laptop users in China. The primary data obtained were analyzed using descriptive statistics, correlations, and structural equation models. An analysis of regression path data indicates that university students' brand choice is not significantly influenced by a brand's personality when buying laptops. According to a study conducted in China, price, product features, and social factors all influenced university students' brand choice when purchasing laptops. Product price is the most important factor in the selection of brands by Chinese students when it comes to buying laptops at universities.

BACKGROUND OF THE STUDY

Since the beginning of globalization, it has become imperative that educational institutions adhere to a global standard. The processes of locating and providing high-quality education have been altered as a result of advances in technology. For the purpose of receiving a high-quality education, it is now standard practice for today's students to keep study journals on their laptops and other digital devices. Following the COVID-19 pandemic, the teaching and learning process in all of China's universities has shifted to being conducted through the online system. Laptop computers have surpassed textbooks and other study aids as the single most important piece of equipment for today's college students. Among the various factors that influence laptop purchase behavior, brand choice behavior plays a crucial role in determining consumer preferences and market share. This research aims to analyze the key factors that influence the brand choice behavior of university students in China when purchasing laptops.

Statement of Problem

Despite the growing importance of laptops in university education, there is limited research on the factors influencing brand choice among Chinese university students (Li, 2023; Wang & Zhang, 2022). This study

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aims to address this gap by analyzing the preferences and motivations behind laptop brand selection, providing insights for manufacturers and marketers to better cater to this demographic.

It is important to note that one of the factors which may have a significant influence on brand selection is the brand personality or the set of traits that may be associated with a particular brand. The influence of brand personality on consumer behavior, including brand choice behavior, has previously been demonstrated through previous studies. As an example of how brand personality dimensions can influence consumer perceptions and preferences, Aaker (1997) found that exciting, sophistication, and sincerity might be considered to be dimensions of brand personality. Therefore, this study hypothesizes that brand personality will have a significant impact on university students' brand choice when purchasing laptops. Previous studies have shown that product features can significantly impact consumer behavior, including brand choice behavior. For example, Kim and Park (2011) found that product features such as performance, design, and functionality can influence consumer perceptions and preferences. This research, therefore, hypothesize that product features will have a positive and significant influence on university students' laptop brand choice.

A social factor may also play a role in influencing a consumer's brand choice behavior, which can be described as the influence of family, friends, and other social networks on a consumer's behavior. It has been shown in previous research that social factors, such as family background, can influence consumer behavior significantly, including the decision to purchase a certain brand. The studies conducted by Bearden and Etzel (1982) have found that social factors can influence the perceptions and preferences of consumers, either positively or negatively, based on things such as the value of reference groups and in terms of a person's social class. The purpose of this study is hence to hypothesize that social factors will influence university students' choice of laptop brands when they are buying laptops to make a decision. Finally, product price is also a key factor that may influence brand choice behavior. Previous studies have shown that price can significantly impact consumer behavior, including brand choice behavior. For example, Zeithaml (1988) found that price can influence consumer perceptions and preferences, particularly in terms of perceived quality and value. Therefore, this study hypothesizes that product price will have a significant influence on the brand choice behavior of university students in China when purchasing laptops.

Research Questions

The research questions have been formulated of the study as presented below:

1. Is there a significant impact of laptop brand personality on laptop brand choice behavior for university students in China?

2. Is there a significant impact of product features on laptop brand choice behavior for university students in China?

3. Is there a significant impact of social factor on laptop brand choice behavior for university students in China?

4. Is there a significant impact of product price on laptop brand choice behavior for university students in China?

Research Objectives

The research objectives have been formulated of the study as presented below:

1. To investigate whether there is a significant impact of laptop brand personality on laptop brand choice behavior for university students in China.

2. To investigate whether there is a positive significant impact of product features on laptop brand choice behavior for university students in China.

3. To investigate whether there is a significant impact of social factor on laptop brand choice behavior for university students in China.

4. To investigate whether there is a significant impact of product price on laptop brand choice behavior for university students in China.

Significance of the Study

Initially, it addresses a critical gap in the literature by examining the key factors that influence brand choice behavior among university students in China when purchasing laptops. While previous studies have investigated brand choice behavior in consumer markets, there is limited research on the specific impact of brand personality, product features, social factors, and product price on the laptop preferences of university students in China. Secondly, the findings of this study can provide valuable insights for marketers and researchers in the laptop industry, as well as other industries that target university students in China. By identifying the most influential factors that shape brand choice behavior, this study can help marketers to develop effective marketing strategies and product designs that meet the needs and preferences of university students in China. Ultimately, the study can contribute to the development of theoretical frameworks and models that explain brand choice behavior in consumer markets. By testing the hypotheses that brand personality, product features, social factors, and product price significantly impact brand choice behavior, this study can provide empirical evidence to support existing theories and models, as well as generate new insights that can inform future research.

Country of Origin

Country of Origin was introduced for the first time by Robert Schooler in (1965). According to the studies, each product in each country was evaluated based on a single cue from the COO of that product in that country. There has been an increase in studies focusing on multiple cues in recent years. In this period of time, the major contributions have been made by Schooler (1965), Bilkey and Nes (1982), Hampton (1977), and Tonberg (1972). There is no doubt that in the international market, it was one of the most important factors that consumers used when evaluating the products they were evaluating. It was found that there was a positive correlation between performance, design, quality, price, and other intrinsic cues, which included the CMO, brand name, price, and performance of the product as well as other intrinsic cues. Astous and Ahmed, (1982), and Liefield (1993), have all made significant contributions to this field besides Eriksson et al, (1984), and Johansson et al, (1985). In all of these studies, the importance of the COO effects on consumer choice was highlighted, along with the other product cues, in relation to the consumer choice process. According to Schooler (1965), the first empirical study on the country of origin was conducted by him. Reierson's (1966 & 1967) focused on perceptions of product quality and concluded that COO effects existed whether it was general products, specific products, or classes of products.

Johansson, et al. (1985) studied the effect of country of origin on auto laptops by including 13 product attributes (find out what the attribute is) and found that stereotyping was present among the respondents. According to them, COO has only a small effect on the overall rating, and does not influence the overall rating significantly. It is concluded that consumers are more likely to use country of origin information when they are unfamiliar with the product they are purchasing. A study conducted by Hooley et al (1988) on the perceptions of COOs across the country indicates that stereotypes are prevalent across the board among COOs. In a study presented information on six attributes of clothing products (shirts and blouses), including information on the country of origin, for clothing items (shirts and blouses). As a result of their research, the company found that the country of origin effect was relatively smaller both before and after the launch of the campaign as compared to that of price and quality attributes.

As Olson and Jacob argue in their 1972 study, consumers evaluate products both intrinsically (quality, style, taste, performance) as well as extrinsically (brand name, price, etc.). When consumers are unable to determine the true intrinsic attributes of an item before they actually experience it, they often use extrinsic cues as a substitute. Hence, in our conceptualization, the country of origin cue can be considered one of the extrinsic cues.

It has been shown that Han (1989) studied the perception of consumers towards the quality of products that are made in a particular country (defined as the country image). He concluded that the image of the country serves as an important factor from which consumers summarize the brand attributes of a brand when they are not familiar with a particular country's products. This indirectly affects their perception of the brand and their attitude towards it. Consumers' perception of countries is influenced largely by the knowledge they have about the countries they wish to visit and the stereotypes they have about them. The study by Wall et al. (1991) shows that country of origin is more important than brand and price to access the quality of a product than the brand and price alone. In their study, they found that higher quality ratings were exhibited in developed countries for all three products (shirt, wallet, and telephone), while lower quality ratings were exhibited in developing countries for all three products.

A conjoint analysis was conducted by Lee, et al. (1992) to determine whether price, warranty, and country of origin had a significant impact on purchasing decisions. As a result, they found that the price factor had the highest relative importance, followed by the warranty and country of origin, which were also significant factors. Studies conclude that buying intentions are influenced by factors like political maturity, traditions, economic development, and level of industrialization. (Hooley, et al 1998 and Lawrence, et al 1992).

Brand personality

A human quality that is linked to a particular brand is referred to as the brand's "personality." According to Venkatesh et al. (2008), the brand personality is defined as the brand that the company is selling to the customers that they are trying to attract. The constructional origins of the brand identity prism cannot be considered complete without the incorporation of the brand personality. According to Aaker (1997b), the term "brand personality" describes the collection of human characteristics that are associated with a brand.

According to Hardjono et al. (2019), there is no data demonstrating a significant relationship between the personalities of excitement components and Gen Y's preference when it comes to deciding brand choices for sportswear. Furthermore, the study found that brand personality traits such as honesty, integrity, sophistication, and robustness have a positive impact on Gen Y's preference for choosing a brand when it comes to choosing a sportswear brand.

Rai (2021) found that in his study on the factors that influence consumers' smartphone purchase intentions in Nepal, he was able to find that brand personality was not a significant factor that influenced smartphone purchase decisions. According to the findings of the study, this was one of the conclusions that were derived from his study. A significant impact has also been found on the purchase intent of customers in Nepal when it comes to purchasing a smartphone according to the price of the smartphone, as well as the product characteristics of the product. It has been suggested by Aaker (1996) that there exists a significant correlation between the personality of a brand and the loyalty of its customers. As Plummer (1985) famously pointed out, "the personality of a brand has a direct impact on the way consumers behave when purchasing the product". Based on Aaker's (1997b) research, it is possible that the perception a consumer has of a brand's personality may be a factor in his or her ultimate decision to purchase that brand. Based on the research conducted by Mulyanegara and Tsarenko (2009), they found that consumers' choices of brand are significantly influenced by the personality of a brand. Studies have shown that the personality of the brand has a positive influence on the attitudes of consumers towards the brand based on the findings of

several studies (Jamal & Goode, 2001; Sirgy, 1982; Wee, 2004). According to Shavitt (1989), the aspect of brand personality is essential in the creation of consumer perceptions and expectations of customer behaviour towards the goods offered by the company.

Consumer relationships with brands and preferences for brands are both influenced by the brand's personality, according to Lee and Kang (2013). Consumer preferences are substantially affected by brand personality, according to Kim et al. The award was given in 2011 in the field of hospitality marketing. Based on Phau and Lau (2000), consumers' perceptions of the personality of a brand influence their preferences. When it comes to umbrella purchases in Sri Lanka, Riyas and Herath (2016) found that brand personality can influence the customer's purchase intention.

H1: There is a significant impact of laptop brand personality on laptop brand choice behavior for university students in China.

Product Features

It is laid out that a feature is an attribute of a product that provides consumers with the level of satisfaction they expect, whether they own, use, or utilise a product. Product features include hardware as well as software. The term "hardware" refers to any device that can be held in the hand or otherwise physically interacted with. The term "software" refers to all of the different procedures, programmes, and documentation that are used on computers. The term "software" can also refer to the computer's operating system as well as its storage memory.

According to Lay-Yee et al. (2013), a product function is an attribute of a product that determines the degree to which the use of a product satisfies the needs and desires of customers. The product's software and hardware are both considered to be part of its feature set. The description of a device that can be physically touched and observed is referred to as its "hardware" in this article. The term "software" refers to all of the processes, procedures, and documentation associated with computer systems. Examples of software include a notebook computer's operating system, its storage memory, and the applications that can be run on it. According to Romaniuk and Sharp's research from 2003, consumers essentially base their preference for a brand on the product attributes of that brand.

Alamro et al. (2011) also found that the characteristics of the product have significant effects on the consumer's propensity to select a particular brand. According to Keller (1993) and Park and Srinivasan (1994), product features are regarded as an essential part of brand knowledge, and they invariably add value to consumers' behaviours regarding their brand choices. A consumer's preference for a particular brand can be influenced by both tangible and intangible product attributes, according to Myers (2003). In Hsee et al. (2009) research, quantitative definitions of product characteristics have a greater impact on brand preference than liking preferences. In Grimm (2005), it was hypothesized that consumer preference for a particular brand is significantly influenced by the product's characteristics.

The characteristics of a product play a significant role in the development of consumer preferences for high-tech products, according to Decker and Trusov (2010). According to Rai (2021), "the product feature has a significant impact on the customer's intention to purchase a smartphone in Nepal." According to Nair et al. (2016), product quality is the most significant factor that influences consumer behavior regarding brand choice, with cell phone features taking second place when it comes to purchasing considerations.

The touch screen, design, and overall aesthetic of mobile phones are the aspects of their "look and feel" that are most frequently praised by consumers. The fundamental elements that have an impact on a consumer's decision to make a purchase include a variety of factors, some of which include hardware factors, software factors, technological factors, social factors, price factors, brand factors, and monetary factors. According to

Sujata (2016), young people's decisions regarding the purchase of a smartphone are significantly influenced by a number of technological and hardware-related considerations. The vast majority of male consumers place a high level of importance on aspects such as memory, brand, hard disc capacity, graphics card memory, and processors. Consumers of laptops are becoming more aware of the importance of product feature selection at the time of purchase.

According to Rajan (2018), consumers prefer to purchase laptops that are both comfortable to use and highly configured in all aspects. In the city of Dhaka in Bangladesh, Tania (2012) conducted research which was focused on the factors that affect the purchase of laptops by teachers as well as the factors that influence their decision to purchase laptops. It was discovered by a researcher that technical features, special features, values, and mobility branding of a laptop have a significant impact on the consumer's decision to purchase a laptop based on the technical features, special features, values, and mobility branding laptop. Pongantung et al. (2019) conducted research at Sam Ratulangi University on the factors driving students' purchase decisions in the selection of laptops, with the purpose of attempting to identify the factors that drive their purchase decisions. In the study conducted by the researchers at Sam Ratulangi University, it was discovered that certain characteristics of products, such as product quality, laptop operating system, and pricing, had a significant impact on the purchases made by students at the university based on their purchasing decisions. Sam Ratulangi University students have also identified the entertainment factor as being one of the most influential factors in the purchase decisions they make when selecting a computer. Additionally, the promotional factor has also been identified as one of the most important factors. A study conducted by Kumar (2011) focused on the factors that influence consumer buying behaviors for laptops in India and the factors that influence that behavior. This study was published in the academic journal Marketing Research as a result of his findings.

A researcher discovered that the attractiveness of the store, the value of the brand, the lowest possible price for the laptop, and after-sale service all have a more significant influence on the consumers' decision to purchase a laptop. A research paper was conducted by Ingavale et al. (2012) with the purpose of determining the factors that influence consumer brand preference in the purchasing of smartphones. They investigated the most important aspects of students' cell phones that were taken into consideration when they purchased a smartphone. As a result of Nasr et al.'s (2006) research, they were able to determine a number of factors that are responsible for influencing customers' decisions to purchase laptops. As a result of their study, they found that consumers make a significant decision to buy a laptop computer based on a number of factors including value-added features, physical appearance, after-purchase service, connectivity, mobility, and after-sale service.

H2: There is a positive significant impact of product features on laptop brand choice behavior for university students in China.

Social Factors

Social factors are those that are present in the society that consumers live in and the environment in which they shop. The social factors that influence in the consumer buying behaviour include members of the consumer's family, friends, and relatives, as well as coworkers. In order for it to take place, it has to do with the interaction of people who are already familiar with each other, such as parents and peers, who have already interacted with each other. Elammari and Cavus (2019) have carried out a study to investigate the factors that influence consumers' choice of brands when they purchase smartphones. Students' brand choice when purchasing smartphones is significantly affected by brand image, product features, and social factors, but not by price. The researchers found that prices do not affect student brand choice as much as brand image and product features. As Farzana (2012) has pointed out, consumers are likely to be influenced when shopping for products that require a lot of effort on their part. This is especially true for family members and friends. Kotler and Armstrong (2012) point out that consumers' behavior is influenced by social factors such

as the small groups the consumer belongs to. These groups include those in his or her family and close friends. According to Ting et al (2011), a study was conducted on the topic of factors that influence a person's intention to buy a smartphone and the factors that influence that decision. In the study, it was discovered that students were reliant on their smartphones to a large extent as a result of social factors. According to Lee and Kang (2013), social influence is the most important factor that contributes to students' dependence on their smartphones at the present time. Not only does it play a significant role in smartphone purchases, but it is also the most influential factor.

According to Thomson et al. (2007), social factors are defined as any factors that have a positive or negative effect on a consumer's feelings, attitudes, thoughts, and behavior. In this research, it was discovered that there is a significant and positive correlation between social factors and individuals' intentions to make a purchase, which is consistent with the findings of the study. According to Rahim et al. (2016), a study was conducted regarding the purchase intentions of college students in regard to the acquisition of smartphones in the near future. In their research, they concluded that three factors, namely brand image, product features, and social factors, have a significant impact on consumers' decision-making when it comes to making a purchase of smartphones, but product sacrifice does not influence the choice of a specific brand when it comes to purchasing smartphones. There was a study conducted by Rai (2020) regarding the decision-making process of consumers in Nepal when it came to purchasing products. A significant component of the study found that social factors have a significant impact on consumer decisions when it comes to the purchase of smartphones in Nepal. According to Nelson and McLeod (2005), when it comes to making a decision to buy a smartphone, many factors influence the decision, including the media, peers, parents, friends, and members of one's own family. As part of his research, Sata (2013) conducted a study to investigate customer behavior when it came to purchasing a smartphone at the time of purchase. In a recent study, researchers found that factors such as product features and price play a significant role in consumers' decision to purchase mobile phones in order to make their lives easier. According to Thomson et al. (2007), family members are considered to be the most significant component of the initial reference of society, which has a significant impact on customers' purchasing behavior.

H3: There is a significant impact of social factor on laptop brand choice behavior for university students in China.

Product Price

It is the price of a good or service that represents the exchange value of that good or service. In order for a product or service to be purchased, a consumer has to spend a certain amount of money in order to do so. This amount is called the price. As one of the most influential factors in determining whether or not a consumer will purchase a particular brand or product, price is one of the most important things that play a role in this decision.

It is a general law of economics that the level of demand for a particular good will decrease whenever its price increases in accordance with the principle known as the law of demand. According to Kotler and Armstrong (2010), price is a measure of the value that the customer pays for the benefit of owning, using, or purchasing a product, or the sum of the value that the customer exchanges for the benefits of having or using that product (Kotler & Armstrong, 2010). Rai (2020) conducted a study to investigate what factors are influencing consumers' choices when it comes to purchasing a smartphone, in order to find out what factors influence their choices. In the research he conducted, it was found that when a buyer is considering the purchase of a smartphone in Nepal, the price of the device plays a significant role in the decision to buy. Researchers Sultan et al. (2016) conducted a study on the extent to which prices, quality, and brand image are all playing a role in university students' purchasing decisions in Karachi in order to determine the degree to which they all affect purchasing decisions. The researchers concluded that the price of the laptop, the quality of the product, and the image of the brand have all a significant influence on the decision to purchase

a laptop by university students in Karachi based on the factors mentioned above. Whether or not a consumer decides to purchase a specific product will be influenced by their opinion regarding the price of the product. The authors of Kotler and Keller (2016) believe that the perception of a product's price can play an important role in expressing information about that product. Therefore, price plays a major role in the decision-making process for customers when purchasing commonly purchased goods, and it also plays a significant role in determining the choice of the retail establishment, the brand, and the product they decide to support (Njuguna, 2014).

Research by Erdem et al. (2006) suggests that customers make their purchasing decisions and make their brand preferences largely based on the price of the product. There is a study that has been conducted by Ayodele and Ifeanyichukwu (2016) that aims to determine the factors that influence adult consumers' brand preferences when they are choosing mobile devices such as smartphones. As they discovered, the characteristics of a smartphone have a significant impact on adults' brand preference, and they have also discovered that when it comes to making a purchase decision, adults' brand preference is influenced by the price of the smartphone as well. There was a discovery made in both of these areas. During the course of a research study in Sri Lanka conducted by Lakshika and Malkanthie (2017), the authors investigated consumer preferences regarding the brands of hair dyes that they purchase, as well as the types that they prefer. Among the factors that have an impact on the brand preference of people who buy hair dyes are the quality of the product, the features of the product, the image of the brand, as well as the price of the product. Nevertheless, the researchers found that the promotion of a brand did not have a significant impact on the preference of a customer for it. In addition, friends and family do not have any significant influence on the brand preference of people who buy hair dyes.

H4: There is a significant impact of product price on laptop brand choice behavior for university students in China

CONCEPTUAL FRAMEWORK

It is commonly understood that conceptual frameworks are set of interconnected concepts that declare factors, constructs, and variables, and presuppose the relationships between them (Miles and Huberman, 1994).

There are a few factors that might influence the brand choice behavior of laptop buyers in terms of their choice of brands. According to the literature review mentioned above, brand personality, attributes of the product, social factors, and the price of the product can be considered as independent variables for assessing brand choice behavior in laptop purchasing. So, the following conceptual framework has been established to carry out the analysis in a systematic way (Figure 1).
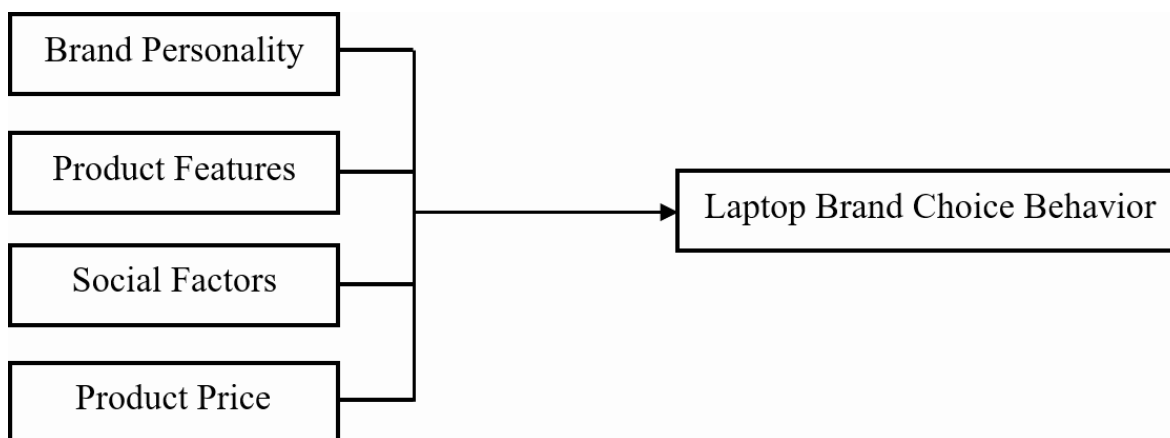

Figure 1: Conceptual Framework

Research Design

Data were collected and analyzed using statistical measures, categorizing this study as quantitative based. Descriptive analysis was used to define the characteristics of the observed data. Means and standard deviations are used to define the situation. An analysis of correlation was performed to determine the relationship between independent variables and brand choice behavior. In order to identify factor loadings and ensure reliability and validity, exploratory factor analysis was conducted and confirmatory factor analysis was conducted. Structural equation modeling was carried out to identify the influence of all four brand personalities, product features, prices, and social factors on brand choice behavior. This was done using SPSS AMOS 23.

Primary sources of data were used for the research. Primary data were collected by using the convenient sampling method. A closed-ended questionnaire was used to gather the information needed to conduct the proposed analysis. A total of 300 questionnaires were distributed to the respondents, but only 259 completed and usable questionnaires were received from the respondents which include the laptop users of university students of China. Therefore, the study's sample size was 259. China's university students are the sample frame of the study. As a result, the study's target population is China's university students who use laptop computers. The primary data was used in the analysis.

The results of the questionnaires were analysed statistically, and the researchers were able to gather the opinions and responses of the target respondents. To collect quantitative data on a variety of aspects relating to the personality of brands, their features, their social contexts, product price, and consumer choice behaviour, structured questionnaires with instructions for self-administration were developed. These questionnaires were used to collect information. The design of the survey included the use of statements of the Likert type, and one of the questions asked respondents to indicate the degree to which they agreed or disagreed with the measurement scales. These statements were evaluated using a Likert-type scale, with 1 representing strong disagreement, 2 representing disagreement, 3 representing somewhat disagreement, 4 representing somewhat agreement, 5 representing agreement, and 6 representing strong agreement. These 6-point Likert scales were comparable to the ones used in (Dhanabalan et al., 2018; Ong & Zien Yusoff, 2015). There was a correlation between the two sets of scales. When a five-point Likert scale is used with a middle point of '3,' meaning that neither agree nor disagree, the study will affect the conclusion based on the findings of the study (Garland, 1991). This is because social desirability bias occurs when the middle point of the scale is neither agree nor disagree. In addition, Si and Cullen (1998) argued that respondents from Asian countries were more likely to select the option that fell into the middle category when compared to respondents from Western countries (Si & Cullen, 1998). It was also discovered that a response scale with even numbers has higher validity and reliability than a response scale with odd numbers (Birkett, 1986; Coelho & Esteves 2007). Because of these considerations, the researchers chose to conduct the study using a Likert scale that has six points.

Descriptive and Correlation Analysis

The collected primary data were analyzed using descriptive statistics and inferential statistics. In the first phase, the mean, standard deviation, and correlation were used to analyze the primary data, and the results of mean, standard deviation, and correlation analysis are presented in Table 1.

The behavior decision scale was used to rank the entire dependent and independent variables, with a score of 1 for "strongly disagree" and 6 for "strongly agree." According to Table 1, the mean scores for the social factor, price factor, brand personality, and product features are 4.81, 5.12, 4.75, and 5.03, respectively. This means that the majority of respondents agree on brand choice behavior, and four independent variables are found to have a substantial impact on brand choice behavior. Brand choice behavior has a mean score of

4.92; this means that there is a significant effect of these four independent variables on brand choice behavior among university students. Besides this, the value of standard deviation of social factors, price, product features, brand personality, and brand choice behavior is less than 1. This reveals that the data are consistent with a minimum value of 1 to a maximum value of 6.

The correlation matrix between the variables under investigation is also presented in Table 1 below. It shows that when university students buy a laptop, there is a strong positive correlation between social factors and brand choice behavior ($r = 0.205$, $p < 0.05$), but there is no significant relationship between price and brand choice behavior ($r = -0.046$, $p > 0.05$). There is a significant relationship between brand personality and brand choice behavior ($r = 0.337$, $p < 0.05$), and there is a significant relationship between product features and brand choice behavior ($r = 0.278$, $p < 0.05$). All of the p-values are statistically significant ($p < 0.05$). As a result, the independent variables (brand personality, social factor, and product features) and brand choice behavior have a positive significant relationship in laptop buying. But, it is also found that there is no significant relationship between price and brand choice behavior in laptop buying. According to the findings of this analysis, there is a strong positive significant relationship between brand personality and brand choice behavior, between features of product and brand choice behavior, as well as between social factors and brand choice behavior, and there is no correlation between price and brand choice behavior of the Chinese university student in the laptop buying.

Table 1: Descriptive Statistics and Correlation Analysis

Variables	Mean	S.D	SF	PR	BP	PF	BC
SF	4.81	.70	1				
PR	5.12	.64	.158*	1			
BP	4.75	.70	.193**	.064*	1		
PF	5.03	.72	.336**	.131*	.104*	1	
BC	4.21	.71	.205**	-.046**	.337*	.278**	1

Exploratory Factor Analysis

The validity of the constructs was identified using exploratory factor. Each construct's factor loadings were found to range from 0.674 to 0.977. All the values of each construct are greater than 0.5, which is the cutoff point proposed by Hair et al. (2010). KMO statistics value is 0.718, and the p-value is less than 0.05 ($p < 0.05$), indicating that factor analysis is sufficient since the KMO value must be greater than 0.6 and it must be significant (Kaiser & Rice, 1974).

Confirmatory Factor Analysis

The study was conducted a confirmatory factor analysis as a means of validating the results of the exploratory factor analysis. With a sample size of 259, a confirmatory factor analysis was carried out using SPSS AMOS 23 with a confirmatory factor analysis. The model fit criteria proposed by Byrne (2010) and Si and Cullen (1998) for measurement models include the Comparative Fit Index (CFI), the Goodness-of-Fit Index (GFI), the Adjusted Goodness-of-Fit Index (AGFI), the Root Mean Square Error of the Approximation (RMSEA), the Standardized Root Mean Square Residual (SRMR), the CMIN/DF, and the PLCOSE, and these models were used to determine the measurement model. An analysis of the hypotheses was performed using structural equation modeling (SEM) in order to test them. Before testing the hypotheses, we tested the model fit indices, which were used as a measure of model accuracy.

To help identify the overall fit of the model, a multi-fit index is illustrated in Table 2. For example, CMIN/DF (1.852) can be seen in Table 4.2, which is lower than the cutoff value established by Byrne

(2010) and Si and Cullen (1998). In light of this, it has been deemed appropriate to proceed with the analysis of this model. As a result, Root Mean Square Error of Approximation (0.055) is also within the recommended range of less than 0.8, as suggested by Byrne (2010) and Si and Cullen (1998). According to the recommendations made by Byrne (2010) and Si and Cullen (1998), the values of CFI, GFI, AGFI, SRMR, and PCLOSE are within the recommended cutoff range values. Consequently, we are able to determine that all of the model fit values that we discussed earlier are within an acceptable range. Taking this into consideration, it is considered feasible to conduct a structural model analysis as a result of this. As far as the structural model results are concerned, it seems that it is feasible to carry out a detailed analysis of them.

Table 2: Models Fit Indices of Overall Measurement Model

Final Model	No. of Scale Items	Fit Indices						
		CMIN/ DF	CFI	GFI	AGFI	RMSEA	SRMR	PCLOSE
		<3	*>.90*	*>.90*	*>.8*	*<.05*	*<.05*	*<0.05*
Model Value	17	1.852	0.964	0.926	0.897	0.055	0.060	0.284
Results		Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Remarks	No need of model improvement							

Validity and Reliability

Data and analytics dependability is a term used to describe the dependability of data and analytics. Among other things, it assesses whether the study is valid and if the manipulation method used to manipulate the data is appropriate (Mason, 2002). To ensure reliable data collection in the study and to minimize the risk of participants not answering the research questions in a timely fashion, the study's validity will be reviewed. There is a term, referred to as "validity", which describes how thoroughly the findings of a study are investigated by research (Saunders et al, 2003).

The structural model was analyzed using structural equation modeling (SEM) as a means of analyzing it. A total of 15 items were used to assess the five constructs as a whole. A test of the reliability of the composite model along with the reliability of the instruments, the average variances extracted, the discriminant validity, and the convergent validity were conducted before testing the model. The results of the tests are summarized in Table 4.3. It was determined that the study was reliable and valid by the results. In order to determine the reliability of the constructs within the measurement model, it has been decided to conduct a composite reliability (CR) analysis of the CFA model. When it comes to convergent validity, the AVE must exceed 0.5, the CR must be greater than 0.7, the value of composite reliability must be higher than 0.7 (CR > 0.7), and the value of composite reliability must exceed the value of average variance extracted (AVE) in order for the composite reliability (CR) to be valid (Bagozzi & Baumgartner, 1994).

As can be seen from the following table, all of the composite reliability (CR) values are above 0.7, ranging from 0.856 to 0.963, and all of the composite reliability (AVE) values are above AVE, thus indicating that the composite reliability values are all greater than AVE. As a general rule, for discriminant validity to exist, the value of the AVE must be greater than the value of the MASV, and the values of the interconstruct correlations between the constructs must be greater than the values of AVE (Fornell & Larcker, 1981). Upon the results of the study, it can be concluded that all the AVE values were higher than the MSV values (AVE > MSV). As both of the above-mentioned assumptions are supported by the discriminant validity criterion, they can be considered as valid due to the fact that the discriminant validity criterion supports them both. It can be seen from Table 3 that there is no reason to be concerned regarding the validity of the data, as shown in the Table 3.

Table 3: An Overview of Reliability and Validity Measures

Constructs	CR	AVE	MSV	MamR (H)	BCA	PRI	BPA	SFA	PFA
SFA	0.960	0.825	0.588	0.099	0.968	0.767			
BPA	0.963	0.858	0.674	0.035	0.987	0.186**	0.821		
PAF	0.856	0.806	0.558	0.099	0.975	0.315***	0.052	0.747	
PRI	0.870	0.823	0.563	0.033	0.907	0.181**	-0.044	0.112+	0.751

Structural Model of the Study

To empirically measure the hypothesized relationship between the variables and constructs of the study, the structural model was used to estimate the relationship between those variables and constructs. For the purpose of analyzing the structural model, there are two indices that can be used. The first is the path coefficient (β), which describes the relationship between the dependent variable and the independent variable as a function of their path coefficient. A second type of value is the R^2 value, which reflects the value of variance explained by the independent variables in the model and therefore reflects the predictive power of the model under consideration. According to the multivariate analysis of the structural model, it was found that the social factor, the brand personality, the product features, and the price factor explained together 40% of the variance in the brand choice behaviors of university students when purchasing laptops. As shown in Figure 2, the structural model estimates path coefficients, three pathways are significant at a 95% level, and one path is not.
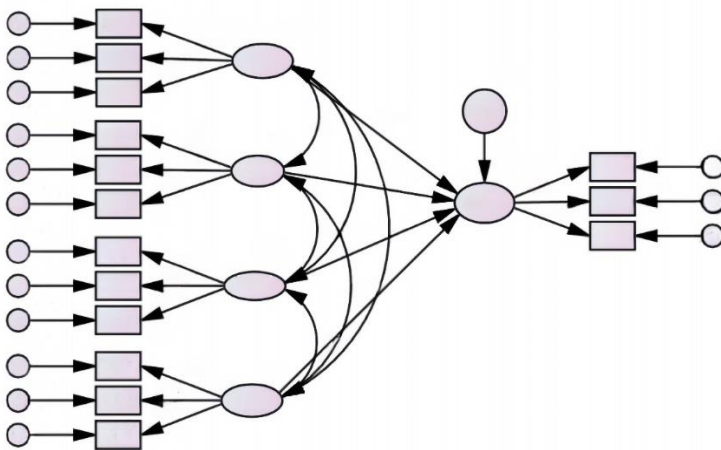

Figure 2: Structural Model

Table 4: Summary of Hypotheses Testing Result

D.V	Path	I.V	Estimate (β)	S.E	C.R	P	Result
BCB	<—	BPA	0–.05	.073	0–.611	.544	**Not Supported**
BCB	<—	PAF	0.212	.061	3.493	***	**Supported**
BCB	<—	SFA	0.217	.092	2.332	.021	**Supported**
BCB	<—	PRI	0.301	.063	4.774	***	**Supported**

In direct opposition to the hypothesis (H1), Table 4 provided conclusive evidence that the personality of the

brand has no significant bearing on consumers' preferences regarding the brand of laptop they purchase (= –0.04; p = 0.544). This finding demonstrated that the personality of the brand does not have a significant influence on the brand preference behaviour of laptops purchased by university students. That hypothesis (H2), which indicated that the features of the product have a significant impact on the brand choice behaviour in the purchase of the Laptop (= 0.212, p = 000), has been confirmed by the results of the study. The fact that the social factor (= 0.217; p = 0.021) is the most important factor in explaining the brand choice behaviour of laptop buyers was also supported by the result, which provided further evidence for Hypothesis (H3). In a similar vein, the findings of the investigation into the purchasing of laptops provide support for the hypothesis (H4) (p = 0.000, = 0.301). This finding provided further evidence that the product price has a significant influence on the brand preference behaviour of university students when it comes to the purchase of laptops. According to the findings of the study, product features, social factors, and price factors all have a significant impact on the brand choice behaviour in the purchases of laptops made by Chinese university students; however, the research found that the brand personality does not have a significant impact on the purchase of laptops.

DISCUSSION

This research paper has one of the major objectives to examine the factors that affect university students' choice of brand when they are buying laptops at the university in China. According to the study, brand personality, product features, social factors, and pricing factors all play a role in determining university students' brand choice behavior when it comes to brand choice. In addition to making a theoretical contribution, this paper makes a practical contribution as well. There was no significant impact of brand personality on university students' brand choice behavior when purchasing laptops, according to the findings of this report. Due to this finding, it cannot be concluded that hypothesis (H1) is supported by this finding. There is a significant negative impact on brand personality, brand choice behavior, and purchase intention, but this is contrary to the findings of Mulyanegara and Tsarenko (2009), Riyas and Herath (2016), and Lee and Kang (2013) that they found there was a positive significant impact. Despite this result, Rai (2021) found in his study that in China, brand personality did not have a significant impact on consumer purchases of smartphones, which is in accordance with the findings of Rai.

The findings of the path analysis performed within the framework of the structural equation modelling (SEM) provide evidence in support of hypotheses (H2), (H3), and (H4). The findings of the study showed that the characteristics of the laptop have a significant impact on the brand preference behaviour of the students attending university. This finding lends credence to the conclusions reached by Romaniuk and Sharp (2003), Alamro and Roewley (2011), Rai (2021), and Rajan (2018), namely that product features have a significant bearing on consumers' patterns of brand preference and their intentions to make purchases. The beta () coefficient of the product attribute factor is 0.212, which indicates that when brand choice behaviour increases by 1, then product attributes also increase by 1 for a total increase of 0.212.

In a similar vein, the statistical findings of structural equation modelling (SEM) revealed that the social factor has a significant impact on the behaviour of choosing a laptop brand among college students. This result is also consistent with the findings of Rai (2020), Sata (2013), and Elammari and Cavus (2019); these researchers discovered that social factors have a significant impact on the behaviour of brand preference and the intention to make a purchase. The beta (ß) coefficient of the social factor is also 0.217, which indicates that when the social factor increases by 1, there is a corresponding increase in behaviour regarding brand choice of 0.217.

Last but not least, the statistical result offers compelling evidence that the price factor does have an effect on the brand choice behaviour in the purchasing of laptops by university students in China. This result of the findings is also consistent with the findings of Ayodele and Ifeanyichukwu (2016), Lakshika and

Malkanthie (2017), Sultan et al. (2016), and Erdem et al. (2006); they found that price has a major impact on brand choice behaviour. Lakshika and Malkanthie (2017) also found that price has a major impact on brand choice behaviour. The price factor has a beta coefficient of 0.301, which indicates that when the price factor increases by 1, the consumer's propensity to choose a specific brand also increases by 0.301.

The findings of the study will serve as a theoretical guideline for those conducting research in the field. The implications of these findings to the laptop industry will also be useful for marketers, who will find that these findings. The findings of this research work may provide new theoretical insights into the factors that influence the behaviour and preference of customers in terms of the brands they choose. The findings of the study could serve as a useful realistic marketing tool for marketing managers, allowing them to more effectively prepare and formulate their marketing plans. According to the results of the study, the characteristics of the product, the social factor, and the price of the product all have a significant influence on the brand choice behaviour of consumers with regard to laptops. On the other hand, the researchers found that the brand personality did not have a significant influence on the brand choice behaviour of university students with regard to laptops. As a consequence of this, marketers may get an inspiration for designing the marketing mixes and may be able to come up with a marketing strategy in order to increase sales in a market that is highly competitive.

This research paper would be helpful to companies in developing a better concept for understanding the factors that influence the brand choice behaviour of customers when they are purchasing laptops on the market. The findings of this research will be used by future researchers to learn more about the factors that influence users' brand choice behaviour, how to increase sales by understanding the factors that influence brand choice behaviour, and how to stimulate users' brand choice behaviour.

LIMITATIONS OF THE STUDY AND FUTURE RESEARCH

There are some limitations which might limit the findings of the study. First of all, only the sample size of 259 has been taken from the students of Chinese universities in China which might limit the research findings regarding the factors influence of brand choice behavior of students toward laptop. Therefore, to improve the generalizability of the result and to draw accurate and holistic results, it is suggested to enlarge the coverage of sample selection to the future researcher. The finding of the study is based on only quantitative approach. Therefore, it is recommended to conduct a qualitative study that provides insight and in-depth understanding of consumer behavior in the future. Only four independent variables such as brand personality, product features, product price, and social factors are undertaken to examine the consumer brand choice behavior. Therefore, it is suggested that the additional variables which are not captured in this research such as brand image, self-congruity, after-sale services, free repair and maintenance services, advertisement, and so forth., can be used to explore the real impact on consumer brand choice behavior to the future researcher. Another limitation of the study is that it explores the impact of independent variables on consumer brand choice behavior on only one product category like laptop and potentially it might limit the generalizability to other domains; therefore, it is recommended for future researchers to carry out research on other product categories and brand also. Additionally, this study has been undertaken the non-probability convenient sampling. Therefore, the findings of this research cannot be generalized to the population due to the nature of sampling method. Therefore, it is recommended for future researchers to conduct research on consumer brand choice behavior from different age groups from various places by using probability sampling method.

RESEARCH IMPLICATION

The research findings of the study provide theoretical guideline to a practitioner as well as to researchers. It is hoped that the result of the research paper can provide new theoretical insights into the factors affecting

consumer brand choice behavior. This model can be used for further study in other contexts, other products, and adding other variables. Based on this model, further qualitative study can also be carried out which may provide insight and in-depth understanding regarding the consumer brand choice behavior. The application of this study is the most important for marketers in the field of laptop. The findings of this paper can be applied as practical marketing tools to the marketing manager for formulating marketing strategies regarding consumer behavior. The result of the study showed that there is significant influence of product price, product features, and social factors on the consumer brand choice behavior and there is no significant impact of brand personality on the consumer choice behavior in the laptop buying. Therefore, the findings of the study would be helpful to the laptop companies to understand the consumer behavior and formulating the marketing policies and strategies. It would also be helpful for the laptop sellers and laptop companies for how to increase the sales of laptop in the market. The confirmation of the impact of price factors, features factors, and social factors on consumer brand choice behavior of laptop should also be taken into account in the design of promotional strategies. The marketing strategies of the company need to focus on the role of price, reference groups, and features of the laptop on consumer behavior. Moreover, it provides valuable suggestions to the companies about product features, product price, social factors, and brand personality.

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