

IMPACT OF CONSUMER PREFERENCES AND BRAND PERCEPTION ON CELL PHONE PURCHASE INTENTION: MODERATING ROLE OF PRICE SENSITIVITY

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ABSTRACT

This study focuses on analyzing the influence of consumer preference and brand awareness on purchase intention of mobile phones in the highly competitive smartphone market of China, with price sensitivity as a moderator. The study used a sample of 400 people in Guangzhou, China, and analyzed the data by Partial Least Squares Structural Equation Modeling (PLS-SEM). The results show that consumer preference, especially sensory, marketing, and psychological factors, have a direct effect on brand awareness and purchase intention. Brand awareness, such as product quality and brand symbol, has the greatest influence on purchase intention. In addition, price sensitivity plays a positive role as a moderator, strengthening the relationship between consumer preference, brand awareness, and purchase intention. Consumers who are price-sensitive tend to consider brand image more before making a purchase decision. The results of the study indicate that businesses should integrate pricing strategies with brand positioning to enhance their competitiveness. In addition, the study extends the S-O-R (Stimulus-Organism-Response) model and the Price-Quality Inference Theory by emphasizing the role of price sensitivity in affecting consumer behavior in the smartphone market. Future research should study the factors of Consumer engagement in the digital world, cross-cultural comparison of consumer behavior, and long-term brand loyalty tracking study to understand the evolving trends in the smartphone market.

Keywords: Consumer Preferences, Brand Perception, Purchase Intention, Price Sensitivity

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INTRODUCTION

Nowadays, consumer preferences and brand awareness are important factors influencing mobile phone purchase intentions in a highly competitive market (Thiyagaraj, 2015; Guo et al., 2020). This is especially true in China's mobile phone market, which has expanded rapidly over the past decade and has become one of the most dynamic markets in the world. As of 2023, China has more than 1.22 billion smartphone users, with a penetration rate of over 85% (Statista, 2023). In the third quarter of 2023, Huawei held a 16.5% market share, followed by Apple at 15.7% and Xiaomi at 14.6% (Counterpoint Research, 2023), reflecting the fierce competition between local and international brands. Traditionally, Chinese consumers have tended to value global brands such as Apple and Samsung due to their image of quality and social status. However, in recent years, local brands such as Huawei and Xiaomi Consumers are increasingly attracted by the development of 5G technology, AI-powered cameras, and homegrown operating systems such as HarmonyOS. Nationalist factors and government policies also play a key role in driving greater consumer adoption of domestic technologies. This shift demonstrates the role of brand awareness in consumer behavior, as well as the increasingly diverse and complex market demands in terms of quality, technology, and price. Although there are several studies that analyze the influence of consumer preferences and brand awareness on purchase intentions in various categories such as electronics, fashion, and luxury goods (Thiyagaraj, 2015; Guo et al., 2020), there is a lack of studies examining the role of price sensitivity in the context of mobile phone purchases specifically. Most research focuses on brand loyalty, advertising, and product features rather than analyzing how price sensitivity affects purchase decisions. In addition, the Chinese mobile phone market is highly competitive, and the pricing strategies of domestic and foreign brands differ significantly (Hustic & Gregurec, 2015; Safitri, 2018). Chinese consumers are found to respond frequently to promotions, discounts, and discount campaigns, making pricing an important role in purchasing behavior. Previous studies suggest that some consumers associate higher prices with better quality, while others prioritize value for money over brand status (Shaik et al., 2020; Kintler, Remeňová, & Kmety, 2023). However, there is no clear study on the role of price sensitivity in determining the relationship between brand awareness, consumer preferences, and purchase intentions in the mobile phone industry. This research is therefore of great importance in filling theoretical gaps and enhancing understanding of consumer behavior in the context of high-value and highly competitive products such as mobile phones. Based on this significance, the researcher aims to study the effects of consumer preference and brand awareness on mobile phone purchase intention, focusing on the role of price sensitivity as a moderator variable. This research will help to understand what factors Chinese consumers prioritize when deciding to purchase mobile phones between local and international brands, and analyze how price strategies affect consumer behavior. The results will be useful for mobile phone manufacturers and marketers to determine appropriate marketing strategies, especially in terms of product pricing, brand image creation, and product development that meets the needs of target groups. Moreover, understanding the interplay between price sensitivity and brand perception can help businesses optimize their competitive positioning. This study also provides insights into how consumers with different levels of price consciousness make purchasing decisions, highlighting the importance of tailored marketing approaches in dynamic and technology-driven markets. In addition, the research results will help businesses understand the trends of the mobile phone market in China and adjust their strategies to be consistent with current consumer behavior, including designing promotions that can stimulate purchasing demand among price-sensitive consumers and increase brand loyalty among those who value quality and innovation. This research will be an important foundation for developing sustainable business strategies that can effectively compete in the Chinese mobile phone market.

LITERATURE REVIEWS

Consumer Preferences

Consumer preferences are an important factor that determines consumer purchasing behavior and has a direct impact on the strategies of organizations in the current market (Voicu, 2013). Scholars have defined consumer preferences differently. Voicu (2013) describes it as the positive motivations consumers have for products and services, which may be based on style, taste, brand, or emotional connection. Meanwhile, Thiyagaraj (2015) sees it as personal taste that can be measured by the level of satisfaction, which allows products to be ranked according to the value that consumers perceive. Weible (2015) extends this concept to the food industry, pointing out that factors that influence consumer preferences include taste, price, health, and society's attitudes towards the product manufacturing process. Consumers in the Chinese smartphone market have significantly changed their preferences in recent years, due to technological advancements, national pride, and the competitive pricing strategies of local brands (Guo et al., 2020). In the past, global brands such as Apple and Samsung were popular, but local brands such as Huawei, Xiaomi, and Oppo have become increasingly popular. By using the strategy of delivering advanced technology at an affordable price (Statista, 2023). The factors that affect consumer preferences are divided into three main components: psychological factors, marketing factors, and sensory factors (Font-i-Furnols & Guerrero, 2014). Psychological factors, such as consumer personality, motivation, and attitude, influence product selection (McGuire, 1976; Babakayev et al., 2018), while marketing factors, such as promotion, packaging, and advertising, can determine consumer perception and behavior (Portakalci & Kiliç, 2018; Ebrahim et al., 2016). In terms of sensory factors, researchers have found that sensory marketing, such as light, color, sound, and smell, affect customers' feelings and promote positive consumer experiences (Biswas, 2019; Kim, 2021). A proper understanding of consumer preferences is essential for organizations, as it allows them to develop marketing strategies that effectively respond to consumer behavior. It also allows them to price products in line with consumers' perceived value and promote competitive advantage in a rapidly changing market (Hydock & Wathieu, 2021; Alsubhi et al., 2023). Recent studies suggest that sensory and psychological factors significantly shape consumer engagement, particularly in high-involvement products like smartphones. However, limited research has explored how these factors interact with price sensitivity, which is crucial in understanding consumer responses to brand messaging and promotional pricing.

Brand Perception

Brand perception is a very important concept in marketing and brand management, referring to how consumers perceive and understand a brand, which is influenced by personal experiences, marketing messages, and the overall reputation of the brand (Kral & Janoskova, 2020). Scholars define brand perception in many dimensions, for example, Conway (2017) describes it as the image that customers perceive and use to compare the brand with competitors, while Alguacil, Crespo-Hervás, and Pérez-Campos (2020) propose that it is the perception of information that a business transmits through marketing channels. This may vary by population group. Dzyabura and Peres (2021) focused on consumers' psychological associations with brands, such as feelings and associated attributes, while Guliyev (2023) pointed out that brand awareness is an important variable influencing purchase decisions and emotional relationships with customers. In addition, Kaur and Singh (2023) emphasized that brand awareness helps build engagement and influences organizational success. Brand perception has many components, such as perceived quality (Clemenzenz, Brettel, & Moeller, 2012), brand position in the market (Azmat & Lakhani, 2015), brand symbolism (Muller, 2014), ethical responsibility (Singh, Iglesias, & Batista-Foguet, 2012), and emotional value (Yan, 2019). Perceived quality directly affects consumers' evaluations of products and services. For example, Vranešević and Stančec (2003) found that brands influence decisions about

product attributes. Brand positioning influences the image creation and communication of product value (Bilgili & Ozkul, 2016), while brand symbols help consumers feel emotionally connected to the brand, such as by choosing an image that conveys universality (Qi & Tang, 2011). In addition, the brand's ethical responsibility is a factor in building customer trust and loyalty (Brunk, 2012), including the emotional value that arises from psychological associations with the brand (Tsai, 2005), which influences repeat purchase behavior. Brand awareness affects business success by enhancing customer loyalty, building credibility, and increasing the potential for pricing products (Zhang, 2015; Mehra & Jain, 2021). Therefore, good brand image management is an important strategy for competing and building sustainable relationships with customers (Alvarez & Fournier, 2016; Erkmén & Hancer, 2019). Incorporating price sensitivity into brand perception analysis provides a more comprehensive view of consumer decision-making. Consumers may perceive higher-priced brands as superior in quality, but price-sensitive individuals balance perceived value with affordability, leading to diverse purchasing behaviors across different market segments.

Price Sensitivity

Price sensitivity refers to the degree to which consumers respond to changes in the price of a product or service, which plays a key role in a business's pricing strategy and can affect the success of the organization (Yee & Xian, 2012). Price sensitivity varies from person to person and depends on a number of factors, such as the availability of alternatives in the market, the necessity of the product, the perception of value, and the consumer's financial status (Nicolau & Masiero, 2013). Shaik et al. (2020) explain that price sensitivity is linked to consumers' switching costs and repurchase intentions, finding that consumers who are highly price-sensitive are more likely to switch to cheaper alternatives. Meanwhile, Kintler, Remeňová, and Kmety (2023) state that using the van Westendorp test can help businesses better understand consumer behavior in international markets. Factors that affect price sensitivity include the availability of substitute products, consumer income, and perceived value (Fu, 2023; HSE, 2020). In a highly competitive market, consumers tend to be more responsive to price changes (Sebestyén & Szabó, 2021). In addition, high-income consumers tend to prioritize quality over price, while low-income consumers tend to purchase products based primarily on price (Furnols & Guerrero, 2014). The perception of value is another factor that affects price sensitivity. Consumers who perceive a product as having high quality or a good brand image are more likely to pay a higher price, while those who do not perceive value may seek cheaper alternatives (Yee & Xian, 2012). Psychological factors also affect price sensitivity; for example, consumers who are facing financial difficulties are more likely to respond to price increases (Shaik et al., 2020). Overall, price sensitivity is a factor that businesses must carefully consider when pricing products to meet the needs of their target audience. Understanding the factors that influence price sensitivity can help businesses develop appropriate strategies to attract both price-sensitive and value-sensitive customers (Kintler, Remeňová, & Kmety, 2023).

Purchase Intention

Purchase intention refers to the likelihood that consumers will decide to purchase a product or service in the future. It is an important indicator for analyzing consumer behavior and predicting business sales trends (Satriawan & Setiawan, 2020). Scholars have defined Purchase intention in multiple dimensions. For example, Li, Xu, and Kumar (2022) stated that purchase intention is influenced by personal factors such as indirect experiences, relationships with sellers, and the influence of language used in communication. While Udayana and Dwifa (2023) found that service quality and word-of-mouth influence consumer purchasing behavior in traditional markets. While Hermawan and Matusin (2023) pointed out that social media advertising with attention-grabbing elements such as the use of celebrities and creative design have a positive effect on Purchase intention. Factors affecting purchase intention are divided

into internal and external factors. Internal factors include needs, beliefs, previous experiences, and personal values (Satriawan & Setiawan, 2020; Li, Xu, & Kumar, 2022). Consumers tend to buy products that meet their needs and have had a good experience with the brand before. While external factors such as marketing strategies, advertising, recommendations from close friends and the influence of social media also plays a significant role in consumer purchasing behavior (Yayar & Demir, 2014; Ebrahim et al., 2016). Sales promotions, such as discounts and promotions, can encourage consumers to make purchasing decisions more easily (Paley, 2021). In addition, price, quality, and product availability are important factors that directly affect purchase intention, with consumers often choosing products that are value for money and high quality (Furnols & Guerrero, 2014). Organizations that can understand and adjust their marketing strategies to align with consumer needs will be able to increase purchase intention and effectively stimulate sales. Understanding the factors that influence consumer purchase intention will help businesses develop marketing strategies, product pricing, and advertising that are appropriate for their target audience, which is the key to generating sales and long-term success (Furnols & Guerrero, 2014; Paley, 2021).

Conceptual Framework and Hypothesis

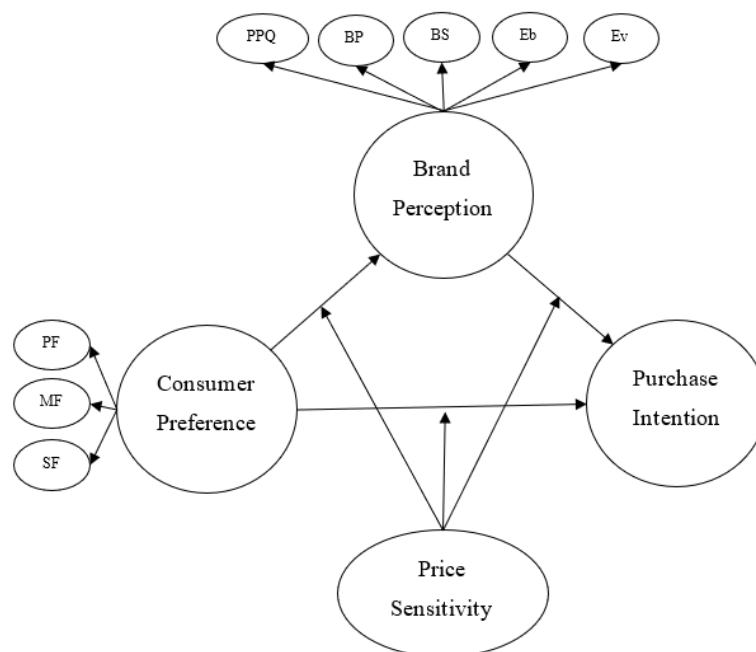


Figure 1 Conceptual Framework and Hypothesis

H1: Consumer preferences influence brand perception.

H2: Consumer preferences influence purchase intention.

H3: Brand perception influences purchase intention.

H4a: Consumer preferences influence brand perception moderated by price sensitivity.

H4b: Consumer preferences influence purchase intention moderated by price sensitivity.

H4c: Brand perception influences purchase intention moderated by price sensitivity.

METHODOLOGY

The target population of this study is the consumers who have purchased and used mobile phones in Guangzhou, China, which is a highly competitive market with a high smartphone usage rate. The sample size of this study is 400 people, which is the number specified by Hair et al. (2010) for Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis, which requires the sample size to be no less than 10 times the number of paths leading to the

latent variable with the most paths in the structural model. Using such a sample size allows for accurate and significant statistical analysis. The sampling used in this study is purposive sampling, which is a method of selecting a sample group based on pre-specified characteristics, such as being a person who has purchased and used a mobile phone. This sampling method allows for efficient access to a sample group relevant to the research issue.

This study used a quantitative data collection method using a questionnaire as the main tool to collect data from a sample of 400 consumers who had purchased and used mobile phones in Guangzhou, China. The questionnaire was systematically developed through a content validity check process by three experts and a pilot test with a small sample of 30 sets to check the clarity of the questions, the understanding of the respondents, and to assess the reliability and validity of the questionnaire using the Index of Item Objective Congruence (IOC) and Cronbach's Alpha coefficient, which must be higher than 0.70 to ensure that the questionnaire is reliable and suitable for use in the research. The questionnaire used in this study consisted of a set of questions designed to measure the main variables: Consumer Preferences, Brand Perception, Price Sensitivity, and Purchase Intention using a 5-point Likert-type scale ranging from 1 = least agree to 5 = most agree. In addition, basic information about the sample such as age, income, and mobile phone purchasing behavior was collected to serve as control variables.

Data analysis in this study is divided into descriptive statistics and inferential statistics to obtain comprehensive data and effectively summarize the research results. For descriptive statistics, frequency, percentage, mean, and standard deviation (SD) were used to describe basic information of the sample group, such as age, income, purchasing behavior, and level of opinion on each main variable, namely consumer preferences, brand perception, price sensitivity, and purchase intention, using a 5-level Likert scale, which interprets the scores into a specified score range. In the inferential statistics section, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used, which is an appropriate method for analyzing the relationship of complex variables. And used with data that is not normally distributed (Non-Normal Distribution), the model evaluation is divided into two steps: 1) Evaluation of the measurement model (Measurement Model) using Factor Loadings, Composite Reliability (CR) must be greater than 0.7 and Average Variance Extracted (AVE) must be greater than 0.5 to check the structural validity and reliability of the variables and 2) Evaluation of the structural model (Structural Model) using the R^2 value to measure the ability to explain the dependent variable, the statistical significance value (p -value < 0.05) and the Standardized Root Mean Square Residual (SRMR) value must be less than 0.08 to confirm the appropriateness of the model. In addition, use the Bootstrapping technique (5,000 resamples) to test the significance of the path coefficient in the structural equation.

RESULTS

Profile of Respondents

According to the study, it was found that respondents from both domestic and international mobile phone brands were evenly distributed. The majority were female, accounting for 219 individuals (54.75%). Most respondents were aged between 31-40 years, totaling 150 individuals (37.50%). In terms of education level, the majority held a bachelor's degree, with 275 individuals (68.75%). The most common monthly income range was between 4,001-5,000 CNY, reported by 230 individuals (57.50%). Additionally, the predominant occupation among respondents was company employees, with 123 individuals (30.75%).

Analysis of Consumer Preferences, Brand Perception, Price Sensitivity, Purchase Intention

Table 1 Analysis of Consumer Preferences, Brand Perception, Price Sensitivity, Purchase Intention

Variables	\bar{X}	SD	Level of opinion
Consumer Preferences			
- Psychological Factor (PF)	3.47	.98	High
- Marketing Factor (MF)	3.48	.98	High
- Sensory Factor (SF)	3.51	.97	High
Overall	3.49	.82	High
Brand Perception			
- Perceived Product Quality (PPQ)	3.48	.94	High
- Brand Position (BP)	3.47	1.02	High
- Brand Symbolism (BS)	3.50	.98	High
- Ethical Brand (EB)	3.38	1.02	Moderate
- Emotional Value (EV)	3.41	.92	High
Overall	3.45	.79	High
Price Sensitivity	3.40	.93	Moderate
Purchase Intention	3.27	1.04	Moderate

From Table 1, the analysis results found that overall consumer liking was at a high level ($\bar{X} = 3.49$, $SD = 0.82$), with the Sensory Factor ($\bar{X} = 3.51$) having the highest value, followed by the Marketing Factor ($\bar{X} = 3.48$) and the Psychological Factor ($\bar{X} = 3.47$). Brand awareness was at a high level ($\bar{X} = 3.45$, $SD = 0.79$), with consumers perceiving Brand Symbolism ($\bar{X} = 3.50$) and Perceived Product Quality ($\bar{X} = 3.48$) were at a high level, while Brand Ethical Brand ($\bar{X} = 3.38$) were at a moderate level. Price Sensitivity ($\bar{X} = 3.40$, $SD = 0.93$) and Purchase Intention ($\bar{X} = 3.27$, $SD = 1.04$) were at a moderate level.

Table 2 Presents the results of structural validity analysis and factor loadings

Factors	Loading	AVE	Dijkstra-Henseler's rho (ρ_A)	Jöreskog's rho (ρ_C)	Cronbach's alpha (α)
Consumer Preferences		.675	0.760	0.862	0.760
- PF	0.817				
- MF	0.828				
- SF	0.820				
Brand Perception		.635	0.858	0.897	0.856
- PPQ	0.781				
- BP	0.790				
- BS	0.779				
- EB	0.824				
- EV	0.810				
Price sensitivity		.656	0.896	0.920	0.895
- PS1	0.815				
- PS2	0.795				
- PS3	0.827				
- PS4	0.805				
- PS5	0.802				
- PS6	0.817				
Purchase intention		.725	0.906	0.930	0.905
- PI1	0.856				
- PI2	0.846				
- PI3	0.839				
- PI4	0.858				
- PI5	0.859				

From Table 2, it was found that all observed variables in the model had factor loadings greater than 0.5, ranging from 0.779 to 0.859, indicating that the indicators of each latent variable were reliable for measurement. Regarding structural validity, Dijkstra-Henseler's rho (ρ_A) values ranged from 0.760 to 0.906, Jöreskog's rho (ρ_c) values ranged from 0.862 to 0.906, and Cronbach's alpha (α) values ranged from 0.760 to 0.905, all of which exceeded the threshold of 0.7, confirming the reliability of the constructs. Furthermore, the latent variables demonstrated strong discriminant validity, as indicated by AVE values exceeding 0.5, ranging from 0.635 to 0.725 (Henseler, Hubona, & Ray, 2016).

Table 3 Comparison of discriminatory accuracy according to the Fornell-Larcker criterion

Factors	Consumer Preferences	Brand Perception	Price Sensitivity	Purchase Intention
Consumer Preferences	.822			
Brand Perception	.319	.797		
Price Sensitivity	.125	.161	.810	
Purchase Intention	.200	.232	.134	.851

* Note: The values in the diagonal represent the square root of AVE.

From Table 3, it was found that the model demonstrated discriminant validity, as indicated by the square root of the Average Variance Extracted (AVE), which was higher than the correlations (r) of each latent variable in the diagonal. The interrelations among the latent variables ranged from 0.125 to 0.319 (Henseler et al., 2016).

Table 4 Results of the impact of Consumer Preferences, Brand Perception, and Price Sensitivity on Cell Phone Purchase Intention.

Factors	Cell Phone Purchase Intention			
	Beta	t-test	p-value	Cohen's F ²
- Consumer Preferences	.226	4.452	.000***	0.049
- Brand Perception	.285	5.291	.000***	0.074
-Price Sensitivity	.173	3.560	.000***	0.035
Factors	Brand Perception			
	Beta	t-test	p-value	Cohen's F ²
-Consumer Preferences	.484	11.615	.000***	0.324
-Price Sensitivity	.231	5.618	.000***	0.074

*** Statistical significance at .001 level

From Table 4, it was found that all factors had a positive and statistically significant effect at the .001 level, with brand awareness having the greatest influence on purchase intention ($\beta = .285$, $t = 5.291$, $p < .001$, $F^2 = 0.074$), followed by consumer preference ($\beta = .226$, $t = 4.452$, $p < .001$, $F^2 = 0.049$) and price sensitivity ($\beta = .173$, $t = 3.560$, $p < .001$, $F^2 = 0.035$). In addition, consumer preference had a high influence on brand awareness ($\beta = .484$, $t = 11.615$, $p < .001$, $F^2 = 0.324$), while price sensitivity had a moderate effect on brand awareness ($\beta = .231$, $t = 5.618$, $p < .001$, $F^2 = 0.074$). These results indicate that consumers with a preference for mobile phones tend to perceive the brand more positively, resulting in higher purchase intentions, while price sensitivity has a lower influence but remains a significant factor influencing purchase decisions.

Table 5 Results of the impact of Consumer Preferences and Brand Perception on Cell Phone Purchase Intention, with Price Sensitivity as a moderating variable

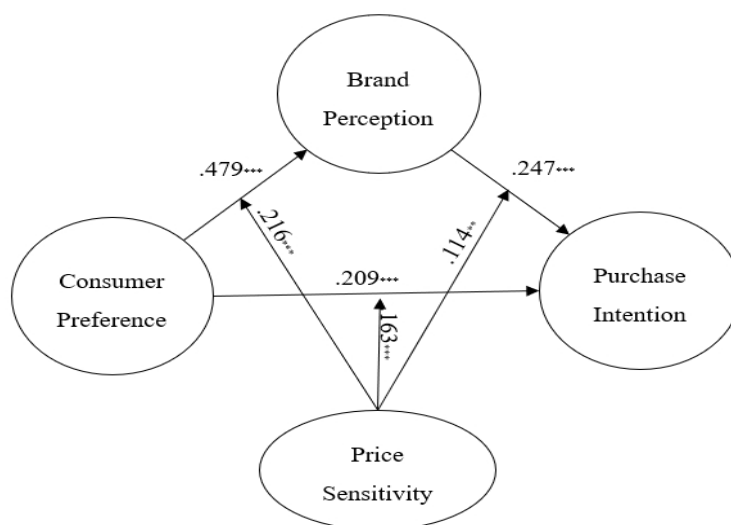
Factors	Cell Phone Purchase Intention			
	Beta	t-test	p-value	Cohen's F ²
- Consumer Preferences (X)	.209	3.700	.000***	0.038
- Brand Perception (Med)	.247	4.118	.000***	0.050
- Price Sensitivity (Mod)	.194	4.221	.000***	0.047
- X*Mod	.163	3.253	.001***	0.027
- Med*Mod	.114	2.359	.009**	0.013

Factors	Brand Perception			
	Beta	t-test	p-value	Cohen's F ²
- Consumer Preferences	.479	11.904	.000***	0.341
- Price Sensitivity (Mod)	.233	5.978	.000***	0.081
- X*Mod	.216	6.709	.000***	0.079

*** Statistical significance at .001 level

** Statistical significance at .01 level

From Table 5, it was found that all factors had a positive and statistically significant effect at the .001 level, with Brand Awareness having the highest influence on purchase intention ($\beta = .247$, $t = 4.118$, $p < .001$, $F^2 = 0.050$), followed by Consumer Preferences ($\beta = .209$, $t = 3.700$, $p < .001$, $F^2 = 0.038$) and Price Sensitivity ($\beta = .194$, $t = 4.221$, $p < .001$, $F^2 = 0.047$). In addition, the moderator variable Price Sensitivity played an important role in enhancing the effects of Consumer Preferences (XMod: $\beta = .163$, $t = 3.253$, $p = .001$, $F^2 = 0.027$) and Brand Perception (MedMod: $\beta = .114$, $t = 2.359$, $p = .009$, Price Sensitivity also influenced brand awareness ($\beta = .233$, $t = 5.978$, $p < .001$, $F^2 = 0.081$) and significantly moderated the relationship between Consumer Preferences and Brand Perception (X*Mod: $\beta = .216$, $t = 6.709$, $p < .001$, $F^2 = 0.079$), indicating that price sensitivity affects consumer behavior both directly and indirectly, especially in the process of creating brand awareness and mobile phone purchase intention.

**Figure 2** Results of hypothesis testing

From Figure 2, it was found that Consumer Preferences and Brand Perception had a statistically significant impact on Cell Phone Purchase Intention at the 0.000 level. The ranking of their influence is as follows: Brand Perception had the strongest impact, with a β value of 0.247,

followed by Consumer Preferences with a β value of 0.209. Meanwhile, Price Sensitivity moderated the relationship between Consumer Preferences and Cell Phone Purchase Intention with a β value of 0.163, and between Brand Perception and Cell Phone Purchase Intention with a β value of 0.114, both of which were statistically significant at the 0.009-0.001 level. Collectively, these variables explained 35.8% of the variance in Cell Phone Purchase Intention ($R^2 = 0.358$). Additionally, Consumer Preferences significantly influenced Brand Perception at the 0.000 level, while Price Sensitivity moderated the relationship between Consumer Preferences and Brand Perception with a β value of 0.216, also statistically significant at the 0.000 level. Together, these variables explained 41.3% of the variance in Brand Perception ($R^2 = 0.413$). Finally, the overall model demonstrated Cohen's F^2 values ranging from 0.013 to 0.341, indicating effect sizes from small to moderate. The subsequent section provides a detailed discussion on the moderating effects of Price Sensitivity on various relationships, as illustrated in Figures 3-5.

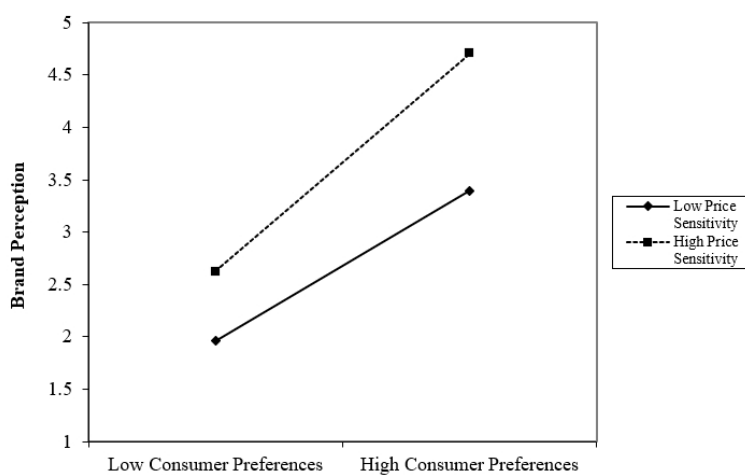


Figure 3 Shows the results of moderating effect of Price Sensitivity between Consumer Preferences and Brand Perception

From Figure 3, it was found that as Consumer Preferences increased, Brand Perception also increased. However, in the group with High Price Sensitivity (dashed line), the slope of the relationship was steeper compared to the group with Low Price Sensitivity (solid line). This indicates that Price Sensitivity plays a positive moderating role, strengthening the relationship between Consumer Preferences and Brand Perception in the high Price Sensitivity group.

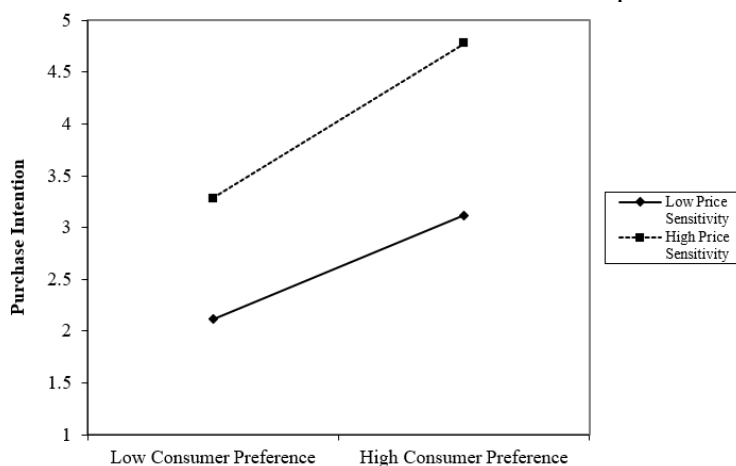


Figure 4 Results of moderating effect of Price Sensitivity between Consumer Preferences and Cell Phone Purchase Intention

From Figure 4, it was found that as Consumer Preferences increased, Purchase Intention also increased. However, in the group with High Price Sensitivity (dashed line), the slope of the relationship was steeper compared to the group with Low Price Sensitivity (solid line). This indicates that Price Sensitivity plays a positive moderating role, strengthening the relationship between Consumer Preferences and Purchase Intention in the high Price Sensitivity group.

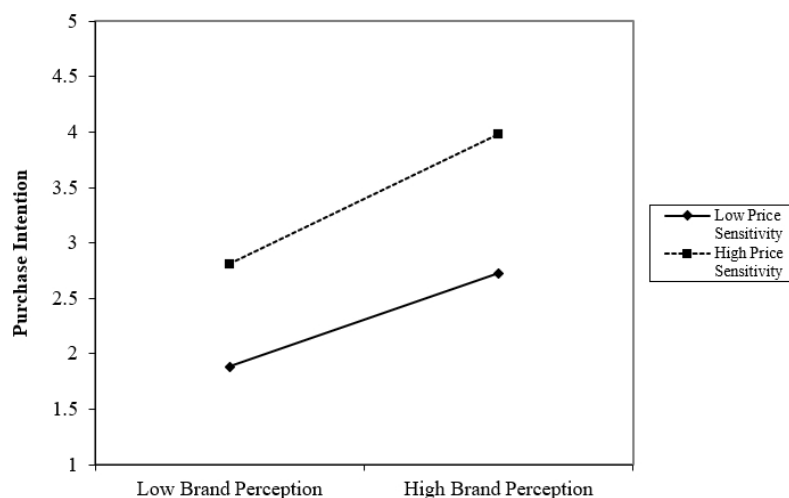


Figure 5 Results of moderating effect of Price Sensitivity between Brand Perception and Cell Phone Purchase Intention

From Figure 5, it was found that as Brand Perception increased, Purchase Intention also increased. However, in the group with High Price Sensitivity (dashed line), the slope of the relationship was steeper compared to the group with Low Price Sensitivity (solid line). This indicates that Price Sensitivity plays a positive moderating role, strengthening the relationship between Brand Perception and Purchase Intention in the high Price Sensitivity group.

Based on the moderating effects of Price Sensitivity observed in all three relationships, it can be concluded that Price Sensitivity functions as a positive moderator, enhancing the strength of the relationships between Consumer Preferences and Brand Perception, as well as their impact on Purchase Intention. The findings suggest that consumers with High Price Sensitivity tend to experience a stronger influence of Brand Perception and Consumer Preferences on their Purchase Intention compared to those with Low Price Sensitivity.

Table 6 Direct effect, indirect effects, and total effect

Factors	Effect	Brand Perception	Purchase Intention
Consumer Preferences	DE	.479	.209
	IE	-	.118
	TE	.479	.327
Brand Perception	DE	-	.247
	IE	-	-
	TE	-	.247
Price Sensitivity	DE	.233	.194
	IE	-	.058
	TE	.233	.252

Note: DE = Direct effect, IE = Indirect effect, TE = Total effect

From Table 6, it was found that Consumer Preferences has a direct influence on Brand Perception (DE = .479) and has a total impact on Purchase Intention of .327 with an indirect

effect through Brand Perception of .118. In addition, Brand Perception has a direct influence on Purchase Intention ($DE = .247$) without an indirect effect. Price Sensitivity has a direct impact on both Brand Perception ($DE = .233$) and Purchase Intention ($DE = .194$) and has an indirect impact on Purchase Intention of .058, resulting in a total impact of Price Sensitivity on purchase intention of .252. The analysis results indicate that Brand Perception plays an important role as a mediating variable in transmitting the influence of Consumer Preferences to Purchase Intention, while Price Sensitivity has both direct and indirect influences, which helps to amplify the effects of other variables on mobile phone purchasing decision behavior.

DISCUSSION

The study results indicate that consumer preferences significantly influence brand perception and purchase intention, which is consistent with the idea that consumer preferences are an important factor in determining brand attitudes, especially in the highly competitive mobile phone industry (Font-i-Furnols & Guerrero, 2014). The study found that consumers who focus on sensory, marketing, and psychological factors tend to develop more positive feelings toward brands, which is consistent with the principle of Self-Congruity Theory, which states that consumers tend to choose brands that reflect their identity and values (Aguirre-Rodriguez, 2017). This study also shows that brands that can meet consumer expectations will stimulate more purchase intentions, which is consistent with the Stimulus-Organism-Response Model (S-O-R Model) that explains that external factors, such as consumer experience and brand marketing, can trigger psychological reactions that lead to purchase behavior (Jacoby, 2020). In this case, consumer preferences result in positive perceptions of the brand, which directly affects purchase intentions. The results of the study show that consumer preference has a high impact on brand perception and a moderate impact on purchase intention, indicating that although consumers are likely to purchase from their preferred brands, other factors such as perceived brand equity still play an important role in their mobile phone purchase decision.

This study also found that brand perception significantly influenced purchase intention, reflecting the Brand Equity Theory, which states that brands with a good image can build trust and engagement with customers, leading to higher purchase intentions (Keller, 2016; Netemeyer et al., 2020). The results showed that consumers place more importance on product quality and brand symbols than ethical factors (Table 1), indicating that consumers make purchase decisions based primarily on their confidence in the brand's quality rather than on the organization's ethics. This is consistent with the Hierarchy of Effects Model, which explains that consumers often make purchase decisions through the process of perception, development of positive emotions, and ultimately, purchase decision (Lemon & Verhoef, 2016). This study shows that brands that can build positive perceptions of their own quality and image will have a greater chance of increasing consumers' purchase intentions. However, although brand perception has the greatest influence on purchase intention, it still requires other supporting factors, such as marketing and product value, to fully meet consumer needs, which is in line with the study of Wu, Yeh, and Hsiao (2018), who indicated that brands with high quality and strong image can effectively increase sales.

The study also found that price sensitivity plays a moderate variable that enhances the relationship between consumer preferences, brand awareness, and purchase intention. The analysis results indicate that consumers who are highly price sensitive tend to pay more attention to price, but at the same time, they also consider the value of the product and brand, which is consistent with the Perceived Value Theory, which states that consumers evaluate products based on the trade-off between the value received and the cost paid (Zeithaml, 2018). Price-sensitive consumers tend to make purchase decisions based on price factors more than those who are not price-sensitive. However, this study shows that price sensitivity plays a positive role, namely, the more consumers pay attention to price, the more they need confidence

in the value of the brand, which is in line with the Price-Quality Inference Theory, which states that consumers tend to perceive higher prices associated with better quality (Mortimer et al., 2020). In addition, the study also shows that as price sensitivity increases, the relationship between consumer preference and purchase intention is stronger, as is the relationship between brand awareness and purchase intention, reflecting the role of price as a moderating factor that can enhance the influence of other factors, especially in a highly competitive market such as the mobile phone industry (Pappas, 2016). These findings highlight the importance of pricing strategy as part of a marketing strategy that must be considered alongside brand management and consumer demand to create long-term competitive advantage. However, this study has some limitations that should be considered, such as the study was conducted in the specific context of Guangzhou, which may not reflect consumer behavior in other regions or countries. In addition, the use of quantitative research methods using questionnaires may not be able to fully reflect consumers' in-depth perspectives. Therefore, further studies should be conducted in a cross-cultural comparative manner and using qualitative methods. Interestingly, while brand perception remains a key driver of purchase intention, the study reveals that price-sensitive consumers exhibit a dual reliance on both affordability and brand trust. This suggests that brands targeting price-conscious buyers should integrate promotional strategies with brand equity reinforcement to sustain long-term consumer engagement. Another factor that may influence purchase intention is the role of social media and user reviews, which were not included in this analysis. In an era where many consumers rely on information from the online world, brands with a positive digital image may be more trusted than price alone, and this element should be further considered in future research.

Contributions

The results of this study provide important policy, practical and theoretical recommendations for businesses, marketers and academics in the mobile phone industry. In terms of policy and practice, companies should enhance consumer preferences by focusing on sensory factors such as product design, high-quality materials and attractive packaging to attract consumers. They should also develop marketing strategies that meet consumer lifestyles, clearly identifying target groups such as businesspeople, students or value-oriented consumers. They should also increase product customization options such as customizable interfaces, colors and accessories to increase brand differentiation. In terms of brand awareness, companies should strengthen their brand symbols by using influencer marketing strategies, brand storytelling and exclusive brand partnerships. They should also increase product quality awareness through strict manufacturing standards and publicizing technological innovations through certifications and customer reviews. Although brand ethical perception has a smaller impact, companies should develop corporate social responsibility (CSR) strategies such as sustainable manufacturing and labor fairness to attract ethically conscious consumers. In terms of price sensitivity, companies should use tiered pricing strategies to cater to a wider range of customers. Both low-end, middle-end and premium markets, including using value-based pricing strategies, focusing on communicating the value of the product through promotions, such as short-term discounts and old device exchange programs to stimulate purchase decisions. In addition, flexible payment plans, such as installments and Buy-Now-Pay-Later systems, should be offered to help reduce the financial burden of price-sensitive customers. In theory and academic terms, this study extends the scope of the S-O-R (Stimulus-Organism-Response) model by showing that sensory and psychological factors influence brand perception and purchase intention, especially for products that require high decision-making such as mobile phones. This study extends the S-O-R model by incorporating price sensitivity into the context of technology products, a highly competitive market where purchase decisions are complex. It also helps strengthen the brand equity theory by emphasizing that the strength of brand symbols and perceived product quality are important factors stimulating purchase decisions, which is consistent with the

principle of creating brand equity in a highly competitive market. In addition, the study helps extend the price-quality inference theory by showing that consumers who are highly price-sensitive rely more on brand perception in evaluating the value of products, indicating that price-sensitive consumers still consider product quality as a primary factor in their purchase decision. The results demonstrate that pricing strategy needs to be integrated with brand positioning, rather than viewed as separate components, which helps companies understand more effective marketing approaches and systematically builds on academic knowledge on consumer behavior, branding and pricing strategy. Additionally, this study contributes to the literature by demonstrating how price sensitivity moderates the effects of consumer preferences and brand perception on purchase decisions. These insights help refine existing theories by incorporating pricing dynamics, making them more applicable to highly competitive, fast-moving consumer goods industries.

Future Research Possibility

First, future studies could examine how digital branding, e-commerce platforms, and online reviews influence the relationship between consumer preferences, brand perception, and purchase intention. Second, given the global nature of the mobile phone industry, further research should investigate how cultural differences affect brand perception, pricing strategies, and consumer decision-making. Third, future research could track consumer behavior over time to assess how brand perception and price sensitivity evolve with technological advancements and changing market conditions. Lastly, expanding the study to include qualitative insights, such as consumer interviews and focus groups, could further reveal the psychological drivers behind price-sensitive purchasing behavior. Additionally, examining the impact of sustainability initiatives on brand perception could provide valuable perspectives on ethical consumerism in the smartphone industry.

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