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Exploring the Loyalty of Consumers with Smart Phone Brand Experience

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Abstract: The brand experience is the specific experience and feelings of the individual consumers on the brand. The brand experience arises from the interaction between the brand and the consumer, not only the efforts made by the company in the process of consumer consumption, but also the marketing efforts done before and after consumption. Through the brand's unique logos, stories, activities, personalities and features, consumers can experience the feelings brought by the brand. In recent years, the market for smart phones has gradually become saturated. Therefore, in addition to focusing on the quality and performance of branded mobile phones, the improvement of consumer loyalty through experience needs to be considered. In this study, the brand experience of smartphones is explored. The results obtained by this study show that: the brand experience have a positive impact on the perceived effectiveness risk, the sensory experience and the intelligent experience have a positive impact on the purchase intention, the effect of the sensory experience is the best, and the brand experience between different brands has no significant difference.

Keywords: Consumer loyalty; brand experience; perceived performance risk; purchase Intention.

1. Introduction

In daily life, there is an intentional or unintentional relationship with the brand. The brand experience is the specific experience and feelings of the individual consumers on the brand [1], which arises from the interaction between the brand and the consumer. The brand experience not only refers to the efforts made by the company in the process of consumer consumption, but also includes the marketing efforts done before and after consumption. Through the unique logos, stories, activities, personalities and characteristics of the brand, the consumers experience the brand. The feeling brought. Because the market competition is very fierce, product differentiation is more difficult, and consumers choose to diversify, it is not enough for companies to provide perfect products [2].

In other words, companies must focus more on examining customer needs and communicating well with customers, creating a comprehensive brand experience for consumers, in order to bring customers a higher level of satisfaction. When an effective relationship between brands and consumers is established, then the brand loyalty can be enhanced and consolidated [3]. Today in the era of experience economy, the impact of brand experience has exceeded the function and

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benefits of products, which gives consumers deeper meaning and eternal memory. The brand experience is a "feeling" that will make consumers want to buy the brand's products and buy back the brand.

In the smart mobile phone market that is becoming saturated, the factors that ultimately affect consumers' purchases depend on consumers' feelings and experiences on brands. Therefore, how to stand out among many brands and increase the purchase intention has become a major challenge in marketing strategy. In recent years, the market for smart phones has gradually become saturated. In addition to paying attention to the quality and performance of the brand's mobile phones, operators of various brands of mobile phones should think about how to make consumers increase their loyalty through experience.

Due to the smart phone market is saturated, how to create a consumer-like experience and thus increase the purchase intention, which is a major challenge in marketing strategy. The objectives of this study include: (1) exploring the relationship between brand experience, perceived effectiveness risk, and purchase intention; (2) exploring the mediating effect of perceived effectiveness risk between brand experience and purchase intention; and (3) targeting different mobile phone brands users have a significant difference in brand experience, perceived performance risk and purchase intent.

This research is mainly to explore the brand experience in the smart phone market. The important factors in making decisions when consumers buy mobile phones will be explored. In the study, the possibility that perceived efficacy risks affect purchase intentions was also explored. Therefore, the brand experience, perceived performance risks and purchase intentions of different brands of mobile phones for consumers will be compared in this study. Finally, we further analyze whether there is a significant difference in the statistics of each mobile phone user.

The rest of this paper is organized as follows. Section 2 is a literature discussion that will illustrate smart phones, brand experiences, perceived performance risks, and purchase intentions. Section 3 illustrates the approach proposed in this study. The results of the questionnaires for the study and the results of the questionnaire were analyzed in Section 4. Conclusions and recommendations are explained in Section 5.

2. Related Works

In this section, smart phones, brand experience, perceived performance risks and purchase intentions will be explained separately.

2.1. Smart Phones

According to IDC's report, global smartphone shipments in the market in 2018 were 334.3 million units. Compared with shipments of 344.4 million units in the same quarter of 2017, the shipments in 2018 are decreased by 2.9%. Market share was first at 23.4% in Samsung, although the growth rate fell by 2.4%. While maintaining its domestic status, Huawei has improved its brand image and achieved success in international development, with a growth rate of 13.8%. Xiaomi's growth rate is as high as 87.8%, which is very strong [4]. Table 1 shows the global smart phone market, the top five companies' shipments, market share and growth rate.

As can be seen from Table 1, the sales volume of global smart phones in the first quarter of 2018 decreased by 6.5% compared with the same period in 2017, and the total sales amounted to 334.3 million. At present, the top five mobile phone brands in the world are ranked in order: Samsung, Apple, Huawei, Xiaomi and OPPO. Among them, Xiaomi smart phone sold 28 million in the first quarter of 2018, with a growth rate of 87.8%, which was the biggest winner of smartphones in the first quarter.

Table 1. The global smart phone market,	, the top 5 companies' shipm	nents, market share and growth rate
(The	shipments are in millions).	

Company	Shipments in the 1 st quarter of 2018	Market share in the 1 st quarter of 2018	Shipments in the 1 st quarter of 2017	Market share in the 1 st quarter of 2017	Growth Rate
Samsung	78.2	23.4%	80.1	23.3%	-2.4%
Apple	52.2	15.6%	50.8	14.7%	2.8%
Huawei	39.3	11.8%	34.5	10.0%	13.8%
Xiaomi	28.0	8.4%	14.8	4.3%	87.8%
OPPO	23.9	7.1%	25.8	7.5%	-7.5%
Others	112.7	33.7%	138.3	40.2%	-18.5%
Total	334.3	100.0%	344.4	100.0%	-2.9%

2.2. Brand Experience

Brand experience is the customer's experience of the brand, including the individualized feelings of the responses generated by the operators in the process of customer consumption and before and after the purchase of branded products or services. The brand experience is the customer's specific experience and feelings about a particular brand. Through the experience of products and services under the corporate brand, customers can learn from the initial understanding, through selection, purchase, use, and insist on repeated purchases.

From the differentiation of psychological structure and the process of combination and the stage of human spiritual pursuit as the division criteria, the experience system related to psychological experience can be divided into five aspects [5], namely: sensory experience, emotional experience, achievement experience, spiritual experience and spiritual experience.

The traditional marketing strategy focuses on product differentiation, and considers consumers rational, but gradually the difference between products is reduced. Therefore, Schmitt proposed the concept of experiential marketing in 1999, arguing that consumers will pursue sensibility in rationality, and tend to feel the feelings of well-known brands compared to the function of products [6]. In 2009, Brakus et al. conceptualized the brand experience and identified the most highly relevant facets, namely sensory experience, emotional experience, behavioral experience, and intelligent experience [7].

Brand experience is a concept of emotional relationship. The five types of experience proposed by Schmitt are more complete overall [6]. Therefore, the strategic management of brands model [6] proposed by Schmitt will be adopted as the experience type of the research.

2.3. Perceptual Efficacy Risk

According to the research results of Bauer, perceptual risk consists of two main structural planes: (1) the uncertainty of the decision outcome, and (2) the severity of the consequences after the wrong decision [8]. Therefore, the perceived risk can be interpreted or defined as: the likelihood that consumers will perceive and perceive uncertain and unfavorable outcomes when purchasing a product or service [9], a subjective expected loss [10]. The concept of loss categories in perceptual risk proposed by many relevant scholars is not completely consistent [8]. The five risk types proposed by Jacoby and Kaplan are the most commonly used by researchers [11]. The five risk types include: performance risk, financial risk, social risk, physical risk, and psychological risk.

In the past related literature, the perceived risk of performance is the most important factor affecting consumer purchasing decisions [12]. Mitchell argues that perceived performance risks could be used to replace the entire perceived risk [13]. Kaplan found that the perceived efficacy risk was 62% in the overall 73% of the perceived risk of perceived risk, so it is sufficient to recognize that the perceived efficacy risk is a considerable degree of explanatory power among the overall perceived risks [14].

2.4. Purchase Intentions

As the perceived risk increases, the consumer's intention to purchase a particular service will decrease, further affecting the actual purchase behavior, resulting in obstacles and challenges in the marketing of the service. According to the previous research results [15], the willingness to purchase has indeed been confirmed as a predictor of actual purchases, and is a subjective tendency of consumers to purchase targets.

Purchase intentions usually depend on the benefits and costs of consumer perception, so when consumers are satisfied with the products or services launched by a particular brand, the willingness to repurchase in the future will be improved. Kotler also put forward a similar view that the purchase intention refers to the degree of consumer confidence in a particular product [16].

3. Research Method

This study focuses on the impact of smart phone users on perceived performance risks in the brand experience, the impact of perceived performance risks on purchase intent, and the perceived effectiveness risk as a mediator of brand experience and purchase intent. This study is a questionnaire for smart phone users, and is based on the students of a science and technology university in the central region. The design of the questionnaire is based on the relevant research [14]. The design of the questionnaire includes four major facets, including: (1) Brand Experience, (2) Perceived Performance Risk, (3) Purchase Intent, and (4) Basic Information.

According to the research results of Kaplan et al., the same assumptions were made as in [14]:

- H1: Brand experience has a positive impact on perceived performance risk.
- H2: Perceived performance risk has a positive impact on purchase intention.
- H3: The brand experience has a positive impact on purchase intentions.
- H4: Perceived performance risk has a mediating effect on brand experience and purchase intent.

The perceived risk is a concept of consumer attitude towards a brand or product, and can be effectively reduced by past impressions and familiarity with the brand. Therefore, the impact of perceived experience on the perception of brand experience for smartphone users will be explored in this study. In addition, according to Kaplan et al.'s related research on perceived risk, it is known that the performance risk and the overall perceived risk are the most relevant and the interpretation ability is also the best, so it is also subject to more researchers [14]. Therefore, the impact of perceived risk on purchase intentions will be explored in this study. Therefore, the relevance of brand experience to purchase intentions will be discussed in this study. In addition, the hypothesis that the brand experience and perceived efficacy risks and perceived effectiveness risks are related to the purchase intention, the perceived effectiveness risk should also be explored between the brand experience and the purchase intention. The architecture of this study is shown in Figure 1.

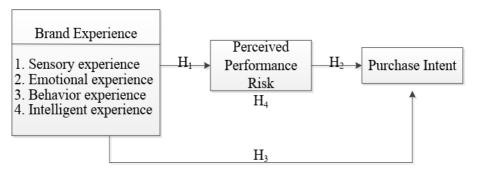


Figure 1. The architecture of this study.

Because perceived risk is the concept of a consumer's attitude towards a brand or product, and can be effectively reduced by past impressions and familiarity with the brand. Therefore, this study will explore the impact of perceived experience on the perception of brand experience for smartphone users. In addition, according to the literature on perceived risk [14], it can be seen that the correlation between performance risk and overall perceived risk is the highest. Therefore, this study will explore the impact of perceived risk on purchase intentions. Moreover, because the brand experience can provide consumers with a clear understanding of the brand and products, it will affect consumers' trust and commitment to the brand, and thus become an important factor in the final purchase decision of consumers. Therefore, this study will explore the relevance of brand experience to purchase intentions.

In this study, the following factors will be analyzed and discussed separately:

- (1) Sample characteristics statistics: including gender and mobile phone brand.
- (2) Reliability and validity analysis: The factors include brand experience, perceived effectiveness risk, and purchase intention.
- (3) Analysis of sample characteristics: including gender and brand experience, gender and perceived efficacy risk, gender and purchase intention.
- (4) ANOVA test: Includes three tests.
 - Due to the variable Brex (brand experience), factor Mpb (mobile phone brand).
 - · Due to variable Per (perceived performance risk), factor Mpb (mobile phone brand).
 - · Due to the variable Pcit (purchase intention), factor Mpb (mobile phone brand).

4. Data Analysis

In this section, the results of the questionnaires and questionnaires for this study will be analysed.

4.1. Questionnaire Test

The questionnaires in this study were tested for students of a university of science and technology. Table 2 shows the results of gender analysis of the students tested. In the analysis of reliability and validity, the factor facets include: brand experience (Brex), perceived effectiveness risk (Per), and purchase intention (Pcit). In the questionnaires, the factor of the Brex includes 3 questions sensory experience (Sense), 3 questions emotional experience (Feel), 3 questions behavior experience (Act), and 3 questions intelligent experience (Itgt). Table 3 shows the reliability and validity analysis of the study, which analyzes factor load, eigenvalue, explanatory variation, cumulative explanatory variation and reliability coefficient.

Table 2. Analysis of the Gender of the Students.

		Number	Percentage	Effective percentage
	Male	66	44.0	44.0
Valid	Female	84	56.0	56.0
	Total	150	100.0	100.0

Table 3. The Analysis of Reliability and Validity.

Factor Facets	Question Number	Factor Load	Eigenvalue	Explanatory Variation	Explanatory Variation	Reliability Coefficient	
	Sense1	0.708					
	Sense2	0.755					
	Sense3	0.687					
Brex	Feel1	0.770					
	Feel2	0.707					
	Feel3	0.697	12.426	62.132	62.132	0.957	
	Act1	0.675	12.420	02.132	02.132	0.937	
	Act2	0.729					
	Act3	0.737					
	Itgt1	0.787					
	Itgt2	0.663					
	Itgt3	0.696					
	Per1	0.713					
	Per2	0.735					
Per	Per3	0.759	1.434	7.171	69.303	0.933	
	Per4	0.818					
	Per5	0.783				LITE	
	Pcit1	0.823			66	MINA	
Pcit	Pcit2	0.868	1.058	5.289	74.592	0.940	
	Pcit3	0.869			1866		

4.2. Analysis of the Results of the Questionnaire

The independent sample *t*-tests are used in the difference analysis of sample characteristics. The difference analysis between gender and each variable is shown in Tables 4, 5 and 6. It can be seen that the significance of the equality test is greater than 0.05, which is not significant.

The ANOVA test for the variable Brex and the factor Mpb is shown in Table 7 and 8. The analysis results show that in the descriptive statistics, the average of Apple is higher, and the significance of the analysis based on the variance is analyzed. If it is greater than 0.05, it is not significant. It can be seen that the mobile phone brand does not affect the brand experience.

The ANOVA test for the factor Mpb due to the variable Per is shown in Tables 9 and 10. In the descriptive statistics, the mean value of Apple is higher, and the significance of the analysis based on the variance is less than 0.05. It is known that the mobile phone brand will affect the perceived performance risk, and the post-test will be performed. The Scheffe method is used, and the results are not significant. Therefore, judging the mobile phone brand does not affect the perceived performance risk, as shown in Table 11.

Table 4. The Difference Analysis between Gender and Brand Experience

	Table 4. The billerence Analysis between Gender and Brand Experience.										
	Levene's variance equal test				t test of equal average						
		F	Significance	Т	df	Significance (two-tailed)	_	Standard error	95% to interve the numeral difference Lower limit	al of iber of	
	Equal variation	.062	.804	549	148	.584	07368	.13416	33880	.19144	
Brex	No equal variance			548	138.085	.585	07368	.13456	33975	.19239	

Table 5. The Difference Analysis between Gender and Perception Efficiency Risk.

			Levene's riance equal test			t test of equal average					
		F	Significance	Т	df	Significance (two-tailed)		Standard error	95% to intervent the numeral difference Lower limit	al of ber of	
Per	Equal variation	.104	.748	1.152	148	.251	.15887	.13792	11367	.43142	
rei	No equal variance			1.158	142.134	.249	.15887	.13725	11244	.43019	

Table 6. The Difference Analysis between Gender and Purchase Intention.

			Levene's iance equal test		t test of equal average						
		F	Significance	Т	df	Significance (two-tailed)	_	l	95% intervented the number differented Lower limit	al of aber of	
Doi	Equal variation	.205	.652	180	148	.857	02850	.15793	34059	.28359	
FCI	variation No equal variance			182	142.855	.856	02850	.15691	33867	.28167	

Table 7. ANOVA Test of Brand Experience and Mobile Phone Brand--Descriptive statistics.

	Table 1.7/1/6 VY 1631 of Braina Experience and Mobile 1 Horie Braina Beson prive Statistics.											
				Descriptive	e statistics							
	N	Mean value	Standard deviation	Standard error	95% confidence interval for the mean Lower limit Upper limit		Minimum	Maximum				
Apple	58	3.7342	.76718	.10074	3.5325	3.9359	1.00	5.00				
Samsung	27	3.4321	.82756	.15926	3.1047	3.7595	1.00	5.00				
OPPO	17	3.4020	.80915	.19625	2.9859	3.8180	1.25	5.00				
ASUS	11	3.4697	.43823	.13213	3.1753	3.7641	2.92	4.33				
HTC	16	3.3177	.83844	.20961	2.8709	3.7645	1.17	4.50				
Sony	12	3.0556	1.09136	.31505	2.3621	3.7490	1.00	4.67				
Xiaomi	7	3.1548	.61882	.23389	2.5825	3.7271	2.17	3.83				
Other	2	2.7917	.88388	.62500	-5.1497	10.7330	2.17	3.42				
Total	150	3.4844	.81372	.06644	3.3532	3.6157	1.00	5.00				

Table 8. ANOVA Test of Brand Experience and Mobile Phone Brand--Variance analysis.

Variance analysis					
	Sum of square	df	Average squared	F	Significance
Between groups	8.183	7	1.169	1.835	.085
Within the group	90.475	142	.637		
Total	98.658	149			



Table 9. ANOVA Test between Perceived Performance Risk and Mobile Phone Brand-Descriptive statistics.

				Восопр	tive statistics.			
Descripti	ive s	tatistics						
-	N	Mean value	Standard deviation	Standard error	95% confidence interval for the mean Lower limit Upper limit		Minimum	Maximum
Apple	58	3.7241	.78747	.10340		3.9312	1.00	5.00
Samsung	27	3.3778	.76728	.14766	3.0743	3.6813	1.00	4.60
OPPO	17	3.3176	.77479	.18791	2.9193	3.7160	1.00	4.20
ASUS	11	3.3818	.36282	.10939	3.1381	3.6256	3.00	4.00
HTC	16	3.2250	.73348	.18337	2.8342	3.6158	1.00	4.00
Sony	12	3.0167	1.24304	.35884	2.2269	3.8065	1.00	4.80
Xiaomi	7	3.3714	.83609	.31601	2.5982	4.1447	2.20	4.60
Other	2	2.0000	1.41421	1.00000	-10.7062	14.7062	1.00	3.00
Total	150	3.4413	.83940	.06854	3.3059	3.5768	1.00	5.00

Table 10. ANOVA Test between Perceived Performance Risk and Mobile Phone Brand-Variance analysis.

Variance analysis					
	Sum of square	df	Average squared	F	Significance
Between groups	12.149	7	1.736	2.655	.013
Within the group	92.835	142	.654		
Total	104.984	149			

Table 11. ANOVA's Post-Testing between the Perceived Performance Risk and Mobile Phone Brand.

(I) Mob	(I) Mah	Average	Standard error	Significance	95% confide	ence interval
(I) Mpb	(J) Mpb	difference (I-J)	Standard error	Significance	Lower limit	Upper limit
	Samsung	.34636	.18838	.846	3715	1.0642
	OPPO	.40649	.22300	.852	4433	1.2563
	ASUS	.34232	.26590	.976	6710	1.3556
Apple	HTC	.49914	.22832	.686	3710	1.3692
	Sony	.70747	.25642	.374	2697	1.6847
	Xiaomi	.35271	.32352	.991	8802	1.5856
	Other	1.72414	.58151	.277	4919	3.9402
	Apple	34636	.18838	.846	-1.0642	.3715
	OPPO	.06013	.25034	1.000	8939	1.0141
	ASUS	00404	.28922	1.000	-1.1062	1.0981
Samsung	HTC	.15278	.25510	1.000	8194	1.1249
	Sony	.36111	.28052	.976	7079	1.4301
	Xiaomi	.00635	.34294	1.000	-1.3005	1.3132
	Other	1.37778	.59253	.611	8803	3.6358
	Apple	40649	.22300	.852	-1.2563	.4433
	Samsung	06013	.25034	1.000	-1.0141	.8939
OPPO	ASUS	06417	.31287	1.000	-1.2565	1.1281
	HTC	.09265	.28163	1.000	9806	1.1659
	Sony	.30098	.30486	.995	8608	1.4627

Name	(I) Mph	(J) Mpb	Average	Standard error	Significance		ence interval
Other	(1) 111po		` /				
Apple							
Samsung							
ASUS HTC							
ASUS HTC							1.1062
Sony	ASUS						1.2565
Xiaomi							
Other 1.38182 .62154 .667 9868 3.750 Apple 49914 .22832 .686 -1.3692 .371 Samsung 15278 .25510 1.000 -1.1249 .819 OPPO 09265 .28163 1.000 -1.1659 .980 OPPO 09265 .28163 1.000 -1.1659 .980 Sony .20833 .30877 1.000 -9684 1.385 Xiaomi 14643 .36641 1.000 -1.5428 1.249 Other 1.22500 .60642 .769 -1.0860 3.536 Apple 70747 .25642 .374 -1.6847 .269 Samsung 36111 .28052 .976 -1.4301 .707 OPPO 30998 .30486 .995 -1.4627 .860 Sony ASUS 36515 .33751 .991 -1.6514 .921 HTC 20833 .30877 1.000<		Sony			.991	9211	1.6514
Apple		Xiaomi			1.000	-1.4794	1.5002
Samsung			1.38182	.62154	.667	9868	3.7504
HTC		Apple	49914	.22832	.686	-1.3692	.3710
HTC	HTC	Samsung	15278	.25510	1.000	-1.1249	.8194
Sony .20833 .30877 1.000 9684 1.3850		OPPO	09265	.28163	1.000	-1.1659	.9806
Xiaomi		ASUS	15682	.31669	1.000	-1.3637	1.0500
Other 1.22500 .60642 .769 -1.0860 3.536 Apple 70747 .25642 .374 -1.6847 .269 Samsung 36111 .28052 .976 -1.4301 .707 OPPO 30098 .30486 .995 -1.4627 .860 ASUS 36515 .33751 .991 -1.6514 .921 HTC 20833 .30877 1.000 -1.3850 .968 Xiaomi 35476 .38455 .997 -1.8202 1.110 Other 1.01667 .61755 .909 -1.3367 3.370 Apple 35271 .32352 .991 -1.5856 .880 Samsung 00635 .34294 1.000 -1.3132 1.300 OPPO .05378 .36311 1.000 -1.3300 1.437 Xiaomi ASUS 01039 .39093 1.000 -1.5002 1.479 HTC .14643 .36641 1.		Sony	.20833	.30877	1.000	9684	1.3850
Apple		Xiaomi	14643	.36641	1.000	-1.5428	1.2499
Samsung		Other	1.22500	.60642	.769	-1.0860	3.5360
Sony OPPO 30098 .30486 995 -1.4627 860 ASUS 36515 .33751 991 -1.6514 921 HTC 20833 .30877 1.000 -1.3850 968 Xiaomi 35476 .38455 997 -1.8202 1.110 Other 1.01667 .61755 909 -1.3367 3.370 Apple 35271 32352 991 -1.5856 880 Samsung 00635 34294 1.000 -1.3132 1.300 OPPO 05378 36311 1.000 -1.3300 1.4370 Xiaomi ASUS 01039 39093 1.000 -1.5002 1.4790 HTC 14643 36641 1.000 -1.2499 1.5422 Sony 35476 38455	Sony	Apple	70747	.25642	.374	-1.6847	.2697
Sony ASUS 36515 .33751 .991 -1.6514 .921 HTC 20833 .30877 1.000 -1.3850 .968 Xiaomi 35476 .38455 .997 -1.8202 1.110 Other 1.01667 .61755 .909 -1.3367 3.370 Apple 35271 .32352 .991 -1.5856 .880 Samsung 00635 .34294 1.000 -1.3132 1.300 OPPO .05378 .36311 1.000 -1.3300 1.437 Xiaomi ASUS 01039 .39093 1.000 -1.5002 1.479 HTC .14643 .36641 1.000 -1.2499 1.542 Sony .35476 .38455 .997 -1.1107 1.820 Other 1.37143 .64829 .723 -1.0991 3.842 Apple -1.72414 .58151 .277 -3.9402 .4919 Samsung -1.37778 <td< td=""><td>Samsung</td><td>36111</td><td>.28052</td><td>.976</td><td>-1.4301</td><td>.7079</td></td<>		Samsung	36111	.28052	.976	-1.4301	.7079
HTC		OPPO	30098	.30486	.995	-1.4627	.8608
Xiaomi		ASUS	36515	.33751	.991	-1.6514	.9211
Other 1.01667 .61755 .909 -1.3367 3.370 Apple 35271 .32352 .991 -1.5856 .880 Samsung 00635 .34294 1.000 -1.3132 1.300 OPPO .05378 .36311 1.000 -1.3300 1.437 ASUS 01039 .39093 1.000 -1.5002 1.479 HTC .14643 .36641 1.000 -1.2499 1.542 Sony .35476 .38455 .997 -1.1107 1.820 Other 1.37143 .64829 .723 -1.0991 3.842 Apple -1.72414 .58151 .277 -3.9402 .491 Samsung -1.37778 .59253 .611 -3.6358 .880 OPPO -1.31765 .60443 .690 -3.6210 .985 Other ASUS -1.38182 .62154 .667 -3.7504 .986 HTC -1.22500 .60642		HTC	20833	.30877	1.000	-1.3850	.9684
Apple		Xiaomi	35476	.38455	.997	-1.8202	1.1107
Samsung 00635 .34294 1.000 -1.3132 1.300 OPPO .05378 .36311 1.000 -1.3300 1.4370 Xiaomi ASUS 01039 .39093 1.000 -1.5002 1.4790 HTC .14643 .36641 1.000 -1.2499 1.542 Sony .35476 .38455 .997 -1.1107 1.8200 Other 1.37143 .64829 .723 -1.0991 3.8420 Apple -1.72414 .58151 .277 -3.9402 .4919 Samsung -1.37778 .59253 .611 -3.6358 .8800 OPPO -1.31765 .60443 .690 -3.6210 .9850 Other ASUS -1.38182 .62154 .667 -3.7504 .9860 HTC -1.22500 .60642 .769 -3.5360 1.0860 Sony -1.01667 .61755 .909 -3.3700 1.3360		Other	1.01667	.61755	.909	-1.3367	3.3700
Samsung 00635 .34294 1.000 -1.3132 1.300 OPPO .05378 .36311 1.000 -1.3300 1.4370 Xiaomi ASUS 01039 .39093 1.000 -1.5002 1.4790 HTC .14643 .36641 1.000 -1.2499 1.542 Sony .35476 .38455 .997 -1.1107 1.8200 Other 1.37143 .64829 .723 -1.0991 3.8420 Apple -1.72414 .58151 .277 -3.9402 .4919 Samsung -1.37778 .59253 .611 -3.6358 .8800 OPPO -1.31765 .60443 .690 -3.6210 .9850 Other ASUS -1.38182 .62154 .667 -3.7504 .9860 HTC -1.22500 .60642 .769 -3.5360 1.0860 Sony -1.01667 .61755 .909 -3.3700 1.3360		Apple	35271	.32352	.991	-1.5856	.8802
Xiaomi OPPO .05378 .36311 1.000 -1.3300 1.4376 ASUS 01039 .39093 1.000 -1.5002 1.4796 HTC .14643 .36641 1.000 -1.2499 1.5426 Sony .35476 .38455 .997 -1.1107 1.8207 Other 1.37143 .64829 .723 -1.0991 3.8426 Apple -1.72414 .58151 .277 -3.9402 .4917 Samsung -1.37778 .59253 .611 -3.6358 .8807 Other ASUS -1.31765 .60443 .690 -3.6210 .9857 Other ASUS -1.38182 .62154 .667 -3.7504 .9867 HTC -1.22500 .60642 .769 -3.5360 1.0867 Sony -1.01667 .61755 .909 -3.3700 1.336			00635	.34294	1.000		
HTC .14643 .36641 1.000 -1.2499 1.542 Sony .35476 .38455 .997 -1.1107 1.820 Other 1.37143 .64829 .723 -1.0991 3.842 Apple -1.72414 .58151 .277 -3.9402 .4919 Samsung -1.37778 .59253 .611 -3.6358 .880 OPPO -1.31765 .60443 .690 -3.6210 .985 Other ASUS -1.38182 .62154 .667 -3.7504 .986 HTC -1.22500 .60642 .769 -3.5360 1.086 Sony -1.01667 .61755 .909 -3.3700 1.336		OPPO	.05378	.36311	1.000	-1.3300	1.4376
Sony .35476 .38455 .997 -1.1107 1.8207 Other 1.37143 .64829 .723 -1.0991 3.8420 Apple -1.72414 .58151 .277 -3.9402 .4919 Samsung -1.37778 .59253 .611 -3.6358 .8800 OPPO -1.31765 .60443 .690 -3.6210 .9850 Other ASUS -1.38182 .62154 .667 -3.7504 .9860 HTC -1.22500 .60642 .769 -3.5360 1.0860 Sony -1.01667 .61755 .909 -3.3700 1.336	Xiaomi	ASUS	01039	.39093	1.000	-1.5002	1.4794
Other 1.37143 .64829 .723 -1.0991 3.8420 Apple -1.72414 .58151 .277 -3.9402 .4910 Samsung -1.37778 .59253 .611 -3.6358 .8800 OPPO -1.31765 .60443 .690 -3.6210 .9850 Other ASUS -1.38182 .62154 .667 -3.7504 .9860 HTC -1.22500 .60642 .769 -3.5360 1.0860 Sony -1.01667 .61755 .909 -3.3700 1.3360		HTC	.14643	.36641	1.000	-1.2499	1.5428
Other 1.37143 .64829 .723 -1.0991 3.8420 Apple -1.72414 .58151 .277 -3.9402 .4910 Samsung -1.37778 .59253 .611 -3.6358 .8800 OPPO -1.31765 .60443 .690 -3.6210 .9850 Other ASUS -1.38182 .62154 .667 -3.7504 .9860 HTC -1.22500 .60642 .769 -3.5360 1.0860 Sony -1.01667 .61755 .909 -3.3700 1.3360		Sony	.35476	.38455	.997	-1.1107	1.8202
Apple -1.72414 .58151 .277 -3.9402 .4919 Samsung -1.37778 .59253 .611 -3.6358 .880 OPPO -1.31765 .60443 .690 -3.6210 .985 Other ASUS -1.38182 .62154 .667 -3.7504 .986 HTC -1.22500 .60642 .769 -3.5360 1.086 Sony -1.01667 .61755 .909 -3.3700 1.336					.723		3.8420
Samsung -1.37778 .59253 .611 -3.6358 .880 OPPO -1.31765 .60443 .690 -3.6210 .985 Other ASUS -1.38182 .62154 .667 -3.7504 .986 HTC -1.22500 .60642 .769 -3.5360 1.086 Sony -1.01667 .61755 .909 -3.3700 1.336	Other	Apple			.277	-3.9402	.4919
OPPO -1.31765 .60443 .690 -3.6210 .985 Other ASUS -1.38182 .62154 .667 -3.7504 .986 HTC -1.22500 .60642 .769 -3.5360 1.086 Sony -1.01667 .61755 .909 -3.3700 1.336			-1.37778	.59253	.611		
Other ASUS -1.38182 .62154 .667 -3.7504 .986 HTC -1.22500 .60642 .769 -3.5360 1.086 Sony -1.01667 .61755 .909 -3.3700 1.336							
HTC -1.22500 .60642 .769 -3.5360 1.086 Sony -1.01667 .61755 .909 -3.3700 1.336							
Sony -1.01667 .61755 .909 -3.3700 1.336							
2 1.011		Xiaomi	-1.37143				

The ANOVA test for the variable Pcit and the factor Mpb is shown in Table 12 and 13. The analysis results show that in the descriptive statistics, the mean value of Apple is higher, and the significance of the analysis based on the variance is analyzed. If it is greater than 0.05, it is not significant. It can be seen that the mobile phone brand does not affect the purchase intention.



Table 12. ANOVA Test between Purchase Intention and Mobile Phone Brand--Descriptive statistics.

Descriptive statistics								
	N	Mean value	Standard deviation	Standard error	95% confidence interval for the mean Lower limit Upper limit			Maximum
Apple	58	3.5287	.91561	.12023	3.2880	3.7695	1.00	5.00
Samsung	27	3.1235	1.01757	.19583	2.7209	3.5260	1.00	5.00
OPPO	17	3.1765	.61371	.14885	2.8609	3.4920	2.00	4.33
ASUS	11	3.3636	.86223	.25997	2.7844	3.9429	1.00	4.00
HTC	16	3.3750	.89339	.22335	2.8989	3.8511	1.00	4.67
Sony	12	3.2222	1.23365	.35612	2.4384	4.0060	1.00	5.00
Xiaomi	7	2.9524	1.11270	.42056	1.9233	3.9815	1.00	4.33
Other	2	1.5000	.70711	.50000	-4.8531	7.8531	1.00	2.00
Total	150	3.3089	.95702	.07814	3.1545	3.4633	1.00	5.00

Table 13. ANOVA Test between Purchase Intention and Mobile Phone Brand--Variance analysis.

Variance analysis								
	Sum of square	df	Average squared	F	Significance			
Between groups	11.657	7	1.665	1.895	.075			
Within the group	124.809	142	.879					
Total	136.466	149						

5. Conclusion

Based on the analysis results of this study, it is learned that the sensory experience and the intelligent experience in the brand experience have a positive impact on the perceived effectiveness risk, and the hypothesis of H1 is established. It means that the higher the sensory experience and intelligent experience of the brand, the more it meets the needs of consumers. The perceived performance risk has a positive impact on the purchase intention. The hypothesis of H2 is established. It indicates that the more the brand's products meet the needs of consumers, the more effective the buyer's intention to buy. In the brand experience, the sensory experience and the intelligent experience have a positive impact on the purchase intention. The hypothesis of H3 is established, indicating that the higher the sensory experience and intelligent experience of the brand, the more effective the buyer's purchase intention. Perceptual performance risk has a complete mediating effect between the sensory experience and the intelligent experience and purchase intention in the brand experience. The hypothesis of H4 is established.

Since perceptual risk is a major factor affecting consumers' purchase of products, according to the results of this study, the sensory experience and intelligent experience in the brand experience can effectively influence the perceived performance risk and indirectly affect the purchase intention. In the era of experience economy, commodities are no longer full-featured, innovative and bring out long-term high sales, but rather whether consumers recognize the brand, whether the brand can give consumers an inspiring experience. Therefore, in the market where these various types of commodities are saturated, enterprises can give priority to the sensory experience and intelligent experience that consumers pay more attention to when constructing the brand experience.

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References

- [1] Kim, J. W., Lee, F., and Suh, Y. G. 2015. Satisfaction and loyalty from shopping mall experience and brand personality. *Services Marketing Quarterly*, 36, 1: 62-76.
- [2] Callon, M. 2016. Revisiting marketization: from interface-markets to market-agencements. *Consumption Markets & Culture*, 19, 1:17-37.
- [3] Coelho, P. S., Rita, P., and Santos, Z. R. 2018. On the relationship between consumer-brand identification, brand community, and brand loyalty. *Journal of Retailing and Consumer Services*, 43: 101-110.
- [4] IDC Worldwide Quarterly Mobile Phone Tracker 2018. https://www.idc.com/tracker/showproductinfo.jsp?prod_id=37.
- [5] Brand experience 2018. http://wiki.mbalib.com/zh-tw/%E5%93%81%E7%89%8C% E4%BD%93%E9%AA%8C.
- [6] Schmitt, B. and Simonson A. 1997. *Marketing aesthetics: The strategic management of brands*. Identity and Image, NY: The Free Press.
- [7] Brakus, J. J., Schmitt B. H., and Zarantonello L. 2009. Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73, 3: 52-68.
- [8] Bauer, R. A. 1967. *Consumer behavior as risk taking*. In D. Cox (Ed.), Risk taking and information handling in consumer behavior, Harvard University Press, Boston, MA, 23-33.
- [9] Dowling, G. R. and Staelin R. 1994. A model of perceived risk and intended risk handling activity. *Journal of Consumer Research*, 21, 1: 119-134.
- [10] Sweeney, J. C., Geoffrey N. S., and Lester W. J. 1999. The role of perceived risk in the quality-value relationship: A study in a retail environment. *Journal of Retailing*, 75, 1: 77-105.
- [11] Jacoby, J. and Kaplan, L. B. 1972. The components of perceived risk. Association for Consumer Research, 382-393.
- [12] Mitchell, V. W. 1992. Understanding consumers' behavior: Can perceived risk theory help? *Management Decision*, 30, 3: 26-31.
- [13] Mitchell, V.W. 1998. A role for consumer risk perceptions in grocery retailing. *British Food Journal*, 100, 4: 171-183.
- [14] Kaplan, L. B., Jacoby J., and Szybillo G. 1974. Components of perceived risk in product purchase: a cross-validation. *Journal of Applied Psychology*, 59, 3: 287-291.
- [15] Fishbein, M. and Ajzen, I. 1975. *Belief, attitude, intention and behavior*. Reading, MA: Addison-Wesley.
- [16] Kotler, P. 2003. Marketing Management. 11th ed., New Jersey: Prentice Hall.

