Research Paper

Exploring the relationship between the brand personality and consumers' willingness to purchase: POPMART blind box brand

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ABSTRACT: *In recent years, blind boxes are becoming more and more popular, which the POPMART brand is more successful among a group of blind box brands. The purpose of this study is to investigate whether there is a relationship between POPMART brand personality and customers' willingness to purchase. The study utilized a quantitative research method by using a questionnaire survey of 238 blind box consumers aged 18-25 years through convenience sampling. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS SEM) and the following finding was drawn: there is a relationship between the four dimensions of Aaker's Brand Personality Measurement Instrument and customers' willingness to purchase. The results of the study emphasize the significant impact of brand personality on consumers' willingness to purchase.*
KEYWORDS: *POPMART, Brand personality, willingness to purchase, blind box*

I. INTRODUCTION

In recent years blind box products have become more and more popular, not only in China, but also blind boxes have started to become popular in several countries, such as India, the United States, Italy, Australia, Malaysia and so on. Purchases can be made both online and in stores. For example, you can easily buy blind boxes from various brands on the Etsy online site. Blind box toys are a type of stylized toys, also known as art toys, and unlike children's toys, blind box toys reach a much wider audience. People purchase blind box products, but not always from the same brand, and there are many blind box brands on the market, such as POPMART, Rolife Suri, mik mek, 52TOYS, TOPTOY, 1983, SONEYANGLE, etc. However, the POPMART brand has always been the most preferred brand in the Chinese market (Qi et al., 2011).

The appeal of the POPMART Blind Box brand comes from its innovative range of designs, high-quality production processes, collaborations with well-known brands and artists, and positive interactions with consumers. Together, these factors shape POPMART's brand personality (Cai, 2020). Excellent IP design has even become its core competitiveness, making it the blind box brand preferred by many consumers and keeping its leading position in the market competition (Wu, 2021).

Based on the above background, the researcher of this paper poses the research question: Is there a relationship between brand personality and customers' willingness to purchase for the POPMART blind box brand? Therefore this study set the research objective: To identify is there a relationship between brand personality and willingness to purchase.

II. RESEARCH HYPOTHESES AND RESEARCH MODEL

Aaker's (1997) study found a positive relationship between brand personality and consumers' willingness to purchase, especially if the product has a better brand personality, consumers are more willing to purchase or continue to purchase the brand at a higher price. This result shows the positive effect of brand personality on willingness to purchase. In addition, previous studies have shown a strong relationship between

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brand personality and customers' willingness to purchase (Yang et al., 2020; Mao et al., 2020; Attor et al., 2022; Borzooei & Asgari., 2023; Lie et al.,2022; Abrar et al., 2019). Although different scholars and different research results, for example, some scholars pointed out that different dimensions of brand personality may have different impacts on willingness to purchase. Some dimensions, such as sincerity and cuteness, were found to have a positive effect on purchase intention. On the other hand, dimensions like excitement and strength had a negative influence（Polyorat & Amatyakul, 2023）. However, most of the past studies have pointed to a strong relationship between brand personality and willingness to purchase, so This study will use alternative hypothesis. This study proposes the hypotheses：

H1: A relationship does exit between brand personality sincerity dimension and willingness to purchase.
H2: A relationship does exit between brand personality sophistication dimension and willingness to purchase.
H3: A relationship does exit between brand personality excitement dimension and willingness to purchase.
H4: A relationship does exit between brand personality competence dimension and willingness to purchase.

In analyzing brand personality and customer willingness to purchase, Aaker's BP (Brand Personality Valuator) brand personality model is widely used (Aaker, 1997; Keller & Richey, 2006; Okazaki, 2006; Geuens et al. 2009; Lee & Rhee, 2008), which measures brand personality by evaluating different dimensions of the brand Sincerity, Sophistication, Excitement, Competence (Aaker, 1997). However, previous studies have not broken down the relationship between the constituent dimensions of brand personality theory and customers' willingness to purchase, therefore, this study will break down the four dimensions of Aaker's (1997) brand personality to delve deeper into the relationship between brand personality and customers' willingness to purchase.
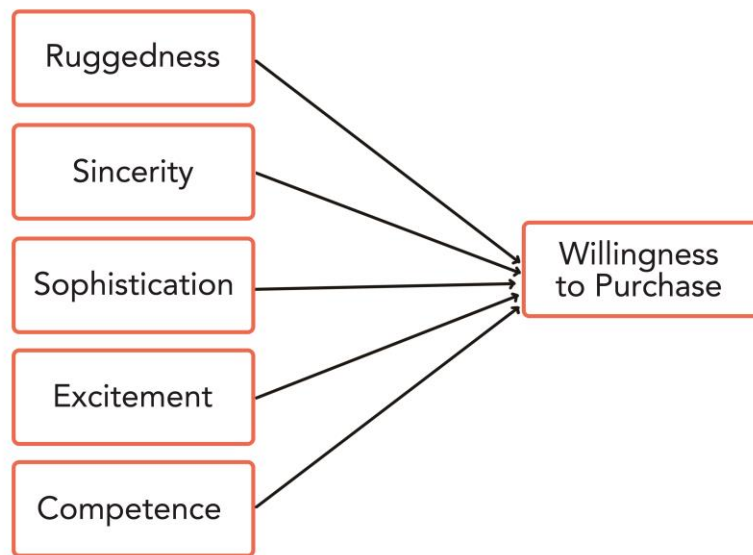
Figure 1: Research Framework

III. METHODOLOGY

The purpose of this part is to discuss the methods used to test the research hypotheses in order to achieve the stated research objective. This chapter selects quantitative related research methods based on the proposed hypotheses, Newby (2014) identifies three paradigms: quantitative, qualitative and mixed methods. According to Denscombe (2010), the quantitative paradigm assumes the existence of an objective reality. The quantitative approach is most appropriate for this study, which uses numerical data to draw statistically tested conclusions. Determining the relationship between variables is a common practice in quantitative research, although statistical analyses can range from simple frequency analyses to complex tests of inference (Rutberg & Bouikidis, 2018; Luu et al., 2023).

The researcher administered a questionnaire to 238 blind box consumers aged between 18-25 through cross sectional sampling. The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS SEM) with the assistance of Smart PLS version 3.

The questionnaire was based on the research framework of this study with reference to maturity scales used by other scholars (Aaker, 1997; Mabkhot et al., 2017; Khan, 2009; Abrham, 2019; Ajzen, 2006; Lee et al. 2021) and the characteristics of POPMART were compiled.
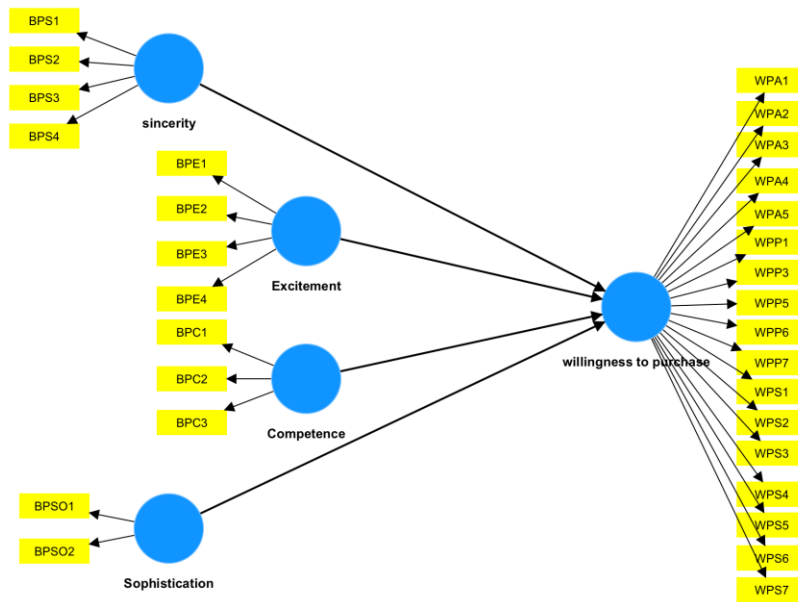

IV. FINDINGS AND DISCUSSION

Figure 2: Research Model

4.1 Reliability and validity
4.1.1 Reliability

Table-1: Reflective Reliability Table

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Competence	0.878	0.888	0.880
Excitement	0.918	0.920	0.918
Sophistication	0.817	0.824	0.819
Sincerity	0.923	0.925	0.923
Willingness to purchase	0.963	0.964	0.962

Reflective instruments were used for the independent variable "four dimensions of brand personality" and the dependent variable " willingness to purchase" According to MacKenzie et al. (2005), reflective instruments are used to measure or describe what already exists, while formative instruments are used to help the researcher to understand and construct new concepts or attributes. Therefore, in this study, all three variables apply to reflective tools. The variable "brand personality" as a reflective tool has been used (Mabkhot et al., 2017; Aaker, 1997) and the variable "willingness to purchase" as a reflective tool has been used (Lee et al., 2021; Ajzen, 2006).

The results of the study showed that the Cronbach's Alpha (CA) values were above 0.80. According to Cronbach (1951), Nunally and Bernstein (1994), the Alpha values ranged from 0 (totally unreliable) to 1 (totally reliable). Suggested thresholds for confirmatory (exploratory) studies: CA>0.800 or 0.700. According to Werts et al. (1974), Nunally and Bernstein (1994), the composite reliability (CR) values are also above 0.80: An attempt is made to measure the sum of the factor loadings of the LVs in relation to the sum of the factor loadings plus the variance of the errors. The resulting values are between 0 (totally unreliable) and 1 (totally reliable). Cronbach's alpha may be substituted to account for unequal weighting of indicators. Suggested thresholds for confirmatory (exploratory) studies: As previously stated, include all dimensions: Competence Cronbach's Alpha (CA) = 0.878, Composite Reliability (CR) = 0.888), Excitement Cronbach's Alpha (CA) = 0.918, Composite Reliability (CR) = 0.920), Sophistication Cronbach's Alpha (CA) = 0.817, Composite Reliability (CR) = 0.824), Sincerity Cronbach's Alpha (CA) = 0.923, Composite Reliability (CR) = 0.925), and Willingness to Purchase Cronbach's Alpha (CA) = 0.963, Composite Reliability (CR) = 0.964, all exceeded the required values, and it can be assumed that all constructs are fully consistent with internal consistency reliability.

4.1.2 Reliability

Fornell and Larcker (1981) propose using the average variance extracted (AVE) to evaluate convergent validity, with a suggested critical value of AVE > 0.50. In our study, all AVE values surpass this threshold, indicating that the measurement instrument meets convergent validity requirements. In summary, all constructs demonstrate robust convergent validity.

Table-2: Average variance extracted (AVE)Table

	Average variance extracted (AVE)
Competence	0.711
Excitement	0.736
Sophistication	0.563
Sincerity	0.751
Willingness to purchase	0.599

Discriminant validity, as defined by Urbach et al. (2010), examines the distinction between a construct and other constructs, ensuring it measures its intended concept. In our study, we employed cross-loading discriminant validity by correlating component scores of each latent variable with all other items, following Chin's (1998) approach. If each indicator predominantly loads on its designated construct compared to others, and each construct has the highest loading on its respective item, it suggests ample differentiation between the model's constructs. The representative construct should have a high cross loading value, while the other constructs should have a low cross loading value. In short, items for a construct can only measure itself. In this study, the cross-loading values for each construct met the discriminant validity values.

Table-3: Cross loading Table

	Competence	Excitement	Sophistication	Sincerity	Willingness to purchase
Competence 1	**0.882**	0.742	0.832	0.815	0.641
Competence 2	**0.900**	0.757	0.837	0.769	0.654
Competence 3	**0.788**	0.753	0.753	0.717	0.536
Excitement 1	0.730	**0.828**	0.668	0.768	0.508
Excitement 2	0.799	**0.883**	0.734	0.773	0.541
Excitement 3	0.719	**0.802**	0.612	0.742	0.492
Excitement 4	0.793	**0.915**	0.722	0.737	0.561
Sophistication 1	0.780	0.741	**0.816**	0.808	0.668
Sophistication 2	0.759	0.717	**0.810**	0.803	0.657
Sophistication 3	0.833	0.746	**0.899**	0.858	0.632
Sophistication 4	0.789	0.755	**0.818**	0.805	0.592
Sincerity 1	0.675	0.540	0.794	**0.852**	0.625
Sincerity 2	0.720	0.668	0.703	**0.721**	0.554
Willingness to purchase 1	0.590	0.511	0.664	0.600	**0.821**
Willingness to purchase 2	0.602	0.556	0.646	0.642	**0.842**
Willingness to purchase 3	0.687	0.548	0.723	0.636	**0.901**
Willingness to purchase 4	0.525	0.435	0.574	0.553	**0.740**
Willingness to purchase 5	0.686	0.586	0.739	0.658	**0.916**
Willingness to purchase 6	0.606	0.524	0.481	0.558	**0.727**
Willingness to purchase 7	0.610	0.584	0.508	0.568	**0.738**
Willingness to purchase 8	0.635	0.566	0.590	0.637	**0.828**
Willingness to purchase 9	0.513	0.416	0.593	0.571	**0.758**
Willingness to purchase 10	0.652	0.640	0.574	0.625	**0.810**
Willingness to purchase 11	0.508	0.385	0.627	0.546	**0.756**
Willingness to purchase 12	0.507	0.366	0.630	0.536	**0.753**
Willingness to purchase 13	0.469	0.378	0.588	0.486	**0.686**

Willingness to purchase 14	0.458	0.339	0.550	0.473	**0.664**
Willingness to purchase 15	0.516	0.473	0.599	0.540	**0.732**
Willingness to purchase 16	0.457	0.363	0.597	0.496	**0.694**
Willingness to purchase 17	0.476	0.327	0.649	0.516	**0.739**

4.2 Correlation and Regression

H1: A relationship does exit between brand personality sincerity dimension and willingness to purchase.
H2: A relationship does exit between brand personality Sophistication dimension and willingness to purchase.
H3: A relationship does exit between brand personality Excitement dimension and willingness to purchase.
H4: A relationship does exit between brand personality Competence dimension and willingness to purchase.

4.2.1 Relationships

In this study, Pearson's correlation coefficient was used to test the hypotheses and the Alternative hypothesis was chosen for this study. Therefore hypothesis testing was conducted with the aim of confirming whether the Alternative hypothesis is acceptable or not. The researcher decided to use the suggested interpretation of the logarithmic value or "r" proposed by (Schober et al., 2018) to determine the strength of the coefficients between the variables.

Table-4: Correlations

	Competence	Excitement	Sophistication	Sincerity	Willingness to purchase
Competence	1.000				
Excitement	0.887	1.000			
Sophistication	0.958	0.799	1.000		
Sincerity	0.910	0.879	0.910	1.000	
Willingness to purchase	**0.727**	**0.613**	**0.787**	**0.736**	1.000

Table-5: Correlation Table

"r" value	INTERPRETATION
0.90 – 1.00	Very strong correlation/ very dependable relationship
0.70 -0.89	Strong correlation/ Marked relationship
0.40-0.69	Moderate correlation/Substantial Relationship
0.10-0.39	Weak correlation / small relationship
0.00-0.10	Negligible correlation/ slight relationship

Table-4 Correlations shows the relationships between (i) the independent variable sincerity and the dependent variable willingness to purchase, (ii) the independent variable sophistication and the dependent variable willingness to purchase, (iii) the relationship between the independent variable excitement and the dependent variable willingness to purchase, and (iv) the relationship between the independent variable competence and the dependent variable willingness to purchase.

According to the table Correlation Table (Schober et al., 2018). The results of the study show that brand personality sincerity and willingness to purchase, with a 95% confidence interval, the r-value is 0.736, or 73,6%. According to the rule of thumb, this number indicates a strong correlation.

The second correlation is the correlation between brand personality sophistication and willingness to purchase, which shows an r-value of 0.787 or 78.7% at 95% confidence interval, a figure that indicates strong correlation according to Schober et al. (2018).

The third correlation is the correlation between brand personality excitement and willingness to purchase, which shows an r-value of 0.613 or 61.3% at 95% confidence interval, a number that indicates Moderate correlation according to Schober et al. (2018).

Finally, the correlation analysis continues to examine the correlation between brand personality competence and willingness to purchase. The r-value is 0.736 or 73.6% at the 95% confidence interval. Empirically, this number indicates a strong correlation.

Next we move on to the value of the coefficient of determination for R^2.

4.2.2 R^2

In this study, the coefficient of determination will be tested by R-square.

Table-6: R-square Table

	R-square	R-square adjusted
Willingness to purchase	**0.636**	0.630

The coefficient of determination of R^2 on Willingness to purchase is 0.636, which according to Cohen (1989) represents larger coefficient determination. Simply put, brand personality predicts the variance on Willingness to purchase, which is 0.636 or 63.6% and the remaining 36.4% is explained by other variables not included in this study. This means that the brand personality variable and the corresponding indicator can be utilized to clarify the percentage change in the Willingness to purchase variable and the corresponding indicator.

4.3 Discussion

In the consumer sphere, brand is an original part that distinguishes it from other competitive solutions and is an essential element contributing to the success of companies and organizations (Hakkak et al., 2015). Brand personality is also closely related to customer's purchase relationship. Brand personality refers to the individual characteristics and traits conveyed by a brand, usually through the brand's behavior, advertising, product design and marketing. Brand personality affects consumers' cognitive and emotional responses to the brand, which in turn affects their willingness to purchase (Polyorat & Amatyakul, 2023). Consumers are usually more inclined to purchase brands that match their values and personality traits. If a brand's personality matches a consumer's personality traits, Consumers are inclined to develop a positive emotional connection with the brand, enhancing their likelihood to make a purchase (Mao et al., 2020). Based on the importance of brand personality and customer Willingness to purchase, four hypotheses are proposed and tested in this paper.

Therefore, according to this model, all hypotheses are accepted and can be explained as follows: first, there is a strong relationship between brand personality Sincerity and customers' willingness to purchase. Second, there is a strong relationship between brand personality sophistication in terms of willingness to purchase. Third, there is Moderate correlation between brand personality Excitement and customers' willingness to purchase. Fourth, there is a strong relationship between brand personality Competence and customers' willingness to purchase. In conclusion, there is a relationship between the four dimensions of Aaker's brand personality BP and customers' willingness to purchase.

We are currently residing in the information age, marked by the emergence of the Internet, smartphones, and various technological innovations (Gao & Chen, 2022). Publicity from POPMART can be seen being placed on various social platforms and video sites, and this type of publicity gives young people a quick sense of identification with the brand. Recognition and comfort are sought in virtual communities and self-identity is built through imaginative and ostentatious consumption (Fu & Zhao, 2022). Consumer behavior has a significant impact on purchase decisions (Jakubanecs et al., 2018). Making positive consumer behavior by establishing a strong brand personality (Hakkak et al., 2015) is beneficial in increasing consumers' willingness to purchase.

V.CONCLUSION

The findings of this study: (i) there is a strong relationship between brand personality sincerity and customers' willingness to purchase. (ii) there is a strong relationship between brand personality sophistication and customers' willingness to purchase. (iii) there is a moderate correlation between brand personality excitement and customers' willingness to purchase. (iv) there is a strong relationship between brand personality competence and customers' willingness to purchase. In conclusion, there is a relationship between the four dimensions of Aaker's brand personality and customers' willingness to purchase.

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