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THE INSTRUMENT DEVELOPMENT FOR WEIBO CONSUMER IMPULSE BUYING INTENTION IN JIANGSU PROVINCE, CHINA

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ABSTRACT

The rapid development of social networking platforms such as Weibo has greatly changed consumer purchasing behaviour, especially in terms of impulse buying. According to CNNIC data, the user base of social e-commerce in China has reached 713 million people. As of 2023, Weibo has 605 million monthly active users. However, unlike traditional e-commerce platforms or offline shopping environments, the rich multimedia content, unique social features, diverse user base, and algorithm-based recommendation mechanisms of social networking platforms have collectively created a completely new shopping environment. This also means that the factors influencing consumers' impulse buying intention have become more complex. Meanwhile, information overload, user fatigue, and authenticity issues on social networking platforms present new challenges. Therefore, based on Hawkins Stern's Impulse Buying Theory (1962) and Prime Theory, this study develops an instrument to measure Weibo consumers' impulse buying intention. The research instrument is primarily designed to evaluate the following variables: promotion, visual appeal, positive user reviews, product features, price, arousal, and impulse buying intention. A quantitative research method was employed, with a pilot test conducted on 40 respondents aged 18-45 from Jiangsu, China, who had experience shopping on Weibo, to test the reliability and validity of the research instrument. The results indicate that the 7 latent constructs demonstrate good reliability and validity. Future research could further validate these measurement statements for application and promotion in different social networking platform contexts.

Keywords: Consumer Buying Intention, Hawkins Stern's Impulse Buying Theory, Instrument Development, Questionnaire, Weibo Social Networking

1. INTRODUCTION

Impulse buying intention is defined as the spontaneous and immediate thoughts and desires of consumers to purchase a specific product or service that occur before impulse buying behaviour (Beatty & Ferrell, 1998). According to Tran (2019), approximately 83% of consumers experience impulse buying driven by emotions, desires, and stimuli from the shopping environment in their shopping decisions. Factors such as promotional activities, product features, price, and visual appeal can trigger consumers' emotional arousal, thereby indirectly influencing their impulse buying intentions (Iftikhar & Iqbal, 2021; Nguyen & Nguyen, 2022). Moreover, impulse purchases play a significant role in retail sales within malls and supermarkets, accounting for up to 80% of purchases for certain products (Huang, 2020). Therefore, impulse buying is crucial for the marketing of many products, and analysing the factors that influence consumers' impulse purchases can help businesses develop appropriate marketing strategies.

According to the "Statistical Report on China's Internet Development," over the past decade, the frequent use of social network platforms has resulted in the number of social e-commerce users in China reaching 713 million (Tian, 2020). This indicates a significant change in consumer impulse buying behaviour. In other words, the proportion of social networking platforms in online shopping transactions is increasing, and traditional e-commerce markets are gradually being

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replaced by social e-commerce. Similarly, according to the "2023 Weibo User Development Report," Weibo had 605 million monthly active users in 2023. In other words, Weibo plays a crucial role in shaping consumer intention and behaviour and driving the development of the e-commerce market (Hong et al., 2023).

Weibo integrates multimedia content with social networking functions, playing a crucial role not only in disseminating product information but also in engaging consumers as active participants in purchase decisions (Zhao et al., 2021). Moreover, Weibo attracts a diverse user base ranging from celebrities and influencers to ordinary citizens. This means that personal experiences shared on social networking platforms, especially by family, friends, or social media influences, can influence the image of products, drive trends, and affect consumers' impulse buying intentions. Algorithmic recommendation systems further stimulate impulse buying by presenting relevant and attractive products tailored to individual preferences and browsing history (Pang et al., 2021). Therefore, compared to traditional offline stores and online e-commerce platforms, today's social networking platforms offer a completely different shopping environment. Thus, this study aims to develop an instrument to measure the impulse buying intentions of consumers on Weibo, in order to gain a deeper understanding of consumer intention in this emerging social shopping environment.

Previous research has demonstrated that shopping environments, whether online or offline, can impact consumers' impulse buying intentions (Chung et al., 2017). For instance, factors such as promotions, product features, prices, and positive reviews can influence consumers' arousal emotions, thereby indirectly affecting their impulse buying intentions (Jen, 2021). However, there is a notable gap in the literature regarding the specific impact of these factors on online impulse buying intentions within the context of the Weibo social network platform. The shopping environment on social network platforms differs significantly from traditional e-commerce platforms. Information overload, user fatigue, algorithmic recommendations, and authenticity issues present new challenges to consumers' impulse buying intentions on social network platforms. Therefore, it is necessary to thoroughly investigate whether factors such as promotions, product features, positive reviews, prices, and arousal still significantly influence consumers' impulse buying intentions in this specific environment. To fill this research gap, this study aims to develop a instrument based on Hawkins Stern's Impulse Buying Theory (1962) and Prime Theory to measure the impulse buying intentions of Weibo consumers, with the goal of gaining a better understanding of consumer intention in digital environments.

2. LITERATURE REVIEW

2.1 Social Networking Platform and Impulse Buying

Huang (2020) defined social networking platforms as various social websites or software, such as Weibo, Xiaohongshu, Douyin, Facebook, Twitter, WhatsApp, and Instagram. As a potential profit model, social networking platforms are attracting the attention of many merchants and users as shopping platforms. According to Leong et al. (2022), promotional information and rich product displays on social networking platforms can attract consumer interest, thereby stimulating impulse buying intentions. In addition, Liu (2023) argues that positive user reviews on live streaming platforms can reduce uncertainty about product quality, significantly impacting consumers' impulse buying intentions. Similarly, Ha & Lee (2018), in their research argue that social media has become the primary social networking platform for consumers to interact with various brands. According to McKinsey & Company (2023) report points out that over 300 million Chinese consumers use social media platforms to gather product information. Furthermore, a study shows that about 83% of users tend to share purchase information with friends on SNS, while nearly 67% make purchasing decisions based on the recommendations of family and friends (Huang, 2020; Salim, 2017). In conclusion, past literature indicates that the shopping

environment on social platforms can influence consumers' purchasing intentions (Singh et al., 2023).

2.2 Weibo Social Networking Platform

Weibo refers to a social media platform based on user relationships, allowing users to access it through various mobile devices such as computers, tablets, or smartphones. Users can instantly share and interact with information through various multimedia formats such as text, images, and videos (Ogino, 2024). In China, Weibo is the most influential social networking platform launched by Sina (Xiong, & Li, 2023). According Weibo Corporation (2023), the platform's monthly active users reached 605 million, with an annual increase of 70 million for three consecutive years.
There has been limited research on the impact of the Weibo network platform on consumers' impulse buying intentions. For example, Huang (2020) believes that Weibo is a social network platform where users are easily influenced by social networks, such as positive recognition or recommendations from friends and family, which can promote impulse buying intentions. In summary, Weibo uniquely integrates multimedia content with social network functions, allowing users to not only post images, videos, and other content but also interact with other users in real time through reposts, comments, and likes. Therefore, this study aims to investigate whether the shopping environment on the Weibo social network platform significantly affects consumers' impulse buying intentions.

2.3 Development of Reliable Instrument

Research instrument are an essential component of the data collection process, playing a critical role in ensuring the validity and reliability of research (Thomas et al., 2018). However, designing instrument that are both effective and reliable can often be challenging.

First, the design of research instrument must prioritize clarity. This means that each measurement item should be expressed in a clear and concise manner, using simple and understandable language. This ensures that respondents from different backgrounds can understand accurately and minimizes misunderstandings caused by ambiguity (Manan et al., 2023). This clarity not only enhances the usability of the questionnaire but also effectively ensures the reliability and validity of the data (Aithal & Aithal, 2020).

Second, it is essential to ensure the relevance of the items, meaning that each item must be closely related to the construct it aims to measure. This is crucial for research, as it guarantees that the collected data is meaningful and directly aligned with the research questions (Azuddin et al., 2024). To achieve this, researchers need to thoroughly understand the definitions of these constructs as outlined in relevant literature and carefully design items based on this foundation. Ensuring item relevance not only improves the reliability and validity of the measurement instrument but also significantly enhances its ability to capture the target data effectively (Hair et al., 2019).

Moreover, a well-designed research item should be specific, focusing solely on a particular aspect. This approach not only enhances the clarity of respondents' answers but also facilitates a deeper analysis of the collected data (Artino et al., 2014). Finally, pilot testing plays a critical role in refining research instruments. Before conducting the main study, researchers perform small-scale pilot tests to validate the reliability and validity of the research instruments. This process helps identify and address potential flaws in the research design, enabling researchers to improve the questionnaire before surveying the respondents (Malmqvist et al., 2019).

Based on the above design principles, this study carefully developed questionnaire items based on the research objectives and the unique characteristics of the Weibo platform. These items were designed to better align with the research context of consumer impulse buying intentions.

Specifically, these items play a crucial role in accurately measuring factors such as promotion, visual appeal, positive user reviews, product features, price, and impulse buying intention, particularly within the context of social networking platforms.

In conclusion, a well-designed research instrument forms the foundation for exploring and quantifying consumer intention. By emphasizing the clarity, relevance, and specificity of items during the design process, the items not only provide more targeted data support but also establishes a solid basis for subsequent analysis and conclusions.

3. METHODOLOGY

This study adopts a quantitative research design using a purposive sampling technique to explore the factors influencing impulse buying intention on the Weibo social networking platform. The methodology consists of three main components: sampling strategy, research instrument design, and data collection procedures.

3.1 Sampling Strategy

This study employs purposive sampling, aiming to gather information from a smaller group that can be generalized to the entire population. Purposive sampling is a non-random sampling technique in which the researcher selects specific individuals or cases based on certain characteristics or criteria relevant to the research question (Babbie， 2010). According to the "2023 Weibo User Development Report," the monthly active users of Weibo reached 605 million in 2023, with a continuous growth of over 70 million for three consecutive years. Among the 34 provinces, the number of Weibo users in Jiangsu province accounts for 8.8%, ranking first. Furthermore, the data further shows that the age distribution of Weibo users is relatively balanced, with the majority concentrated between 18 and 45 years old, and users in this age range account for the largest proportion (Weibo Corporation, 2023). Therefore, Jiangsu province, as the region with the highest number of Weibo users, holds significant social relevance for research. The target respondents of this study are people from Jiangsu, China, aged 18-45 who have experience shopping on Weibo. To collect sample data, the study obtained responses from 40 participants through an online survey questionnaire.

3.2 Research Instrument

This study developed measurement statements tailored to the characteristics of the Weibo platform to evaluate promotion, visual appeal, positive user reviews, product features, price, and impulse buying intention, aiming to better align with the research context of consumer impulse buying intention (Kathuria, & Bakshi, 2024; Suryawardani, Sastika, & Hanifa, 2017). As for the research instruments, the online questionnaire has two (2) sections: section A consists of the indicators which examine the effects of promotion, visual appeal, positive user comments, product features and price on impulse buying intention and arousal. Section B focuses on respondents' demographic information.

Specifically, each statement in Section A was rated using a 5-point Likert scale, with respondents evaluating their level of agreement for each question: 1 representing "strongly disagree," 2 representing "disagree," 3 representing "neutral," 4 representing "agree," and 5 representing "strongly agree." This study designed a total of seven variables, each comprising seven items, all developed based on the characteristics of the Weibo platform. Details are presented in Table 1.
Section B primarily collects demographic information about the respondents, including gender, age, educational level, monthly income, employment status, frequency of online shopping, types of products purchased, monthly spending, and annual total spending. Data from this section provide contextual support for the study and allow for an analysis of the consumption intention characteristics of different groups.

Table 1: Operationalisation Definition of the Constructs

Constructs	Operational Definition	Citations
Promotion	Promotion is defined as a tool seller used to persuade their target consumers to purchase products within a short period of time, such as coupons, discounts, buy-one-get-one-free, special prices and other strategies.	Akram et al., 2018
Visual appeal	Visual appeal refers to the visual elements of products on Weibo platform that attract consumer attention and evoke emotional responses, including fonts, texts, colors, images, animations, videos.	Parboteeah et al., 2009
Positive user reviews	Positive user reviews refer to affirmative or advantageous reviews about products or services on the Weibo platform, which can generate social pressure to influence other users' impulse buying intentions, especially endorsements, recommendations, or trends from friends, family, and influential individuals.	Nguyen & Nguyen, 2022
Product features	Product features refer to the information generated by product's own construction, typically manifested in consumers' emphasis on the design, functionality, quality, composition, and other unique innovative features that help satisfy consumers' preferences and needs.	Gu et al., 2021
Price	Price is defined as the amount of money that consumers are willing to pay when they perceive that the price of a product on the Weibo platform is advantageous compared to similar products or is consistent with its quality.	Kotler & Armstrong, 2018
Arousal	Arousal refers to the degree to which individuals feel stimulated, excited, or alert when exposed to various stimuli on the Weibo social networking platform.	Mehrabian & Russell, 1974
Impulse buying intention	Impulse buying intention refers to a person plan to buy products immediately and spontaneously. This urgency feeling occur due to the temptation in buying product. Impulse buying intention will occur when a person manage to convince himself that he needs to buy the product.	Chen & Wang, 2016

3.3 Pilot Test

The pilot test is a small-scale preliminary investigation conducted prior to the main study, primarily aimed at testing the reliability and validity of research instruments, thereby helping researchers improve the survey questionnaire. In this study, 40 respondents were selected for the pilot test, as it is considered a common number for pilot testing (Browne, 1995). During the pilot test, researchers recorded respondents' comments on their understanding of the questions and made necessary adjustments to the research instruments based on the feedback. The results of the pilot test indicated that the research items demonstrated good reliability and validity, with Cronbach's Alpha values all exceeding 0.7. Therefore, the research instruments required no further modifications and could be directly used for data collection.

4. RESULT

4.1 Construct Reliability and Validity

Reliability refers to the consistency and stability of measurement indicators over time or under different conditions. In other words, it assesses the extent to which an instrument produces consistent results when used repeatedly or by different researchers (Hair et al., 2019). It is typically measured using Cronbach's Alpha coefficient. When the Cronbach's Alpha coefficient of measurement data is greater than 0.7, it indicates that the reliability test of the data is acceptable (Hair et al., 2019).
Validity refers to the assessment of whether the items actually measure the variable they claim to measure. This is crucial for research as it ensures that the collected data is meaningful and relevant to the research questions (Manan et al., 2019). Typically, this is assessed by experts who examine the items to ensure they cover all relevant aspects of the construct. Furthermore, the content validity of an instrument is established based on a sampling framework and peer review (Hair et al., 2019). In summary, to ensure the credibility and accuracy of the research instrument used in this study, it was submitted for evaluation by experts. This process helps verify the design of the research instrument, thereby providing data support for the study (Manan et al., 2022).

During the pilot test phase, the internal consistency of this study was measured using the Cronbach's Alpha value. According to Table 2, the analysis results indicate that the Cronbach's Alpha value for promotion is 0.831. Therefore, the items in this study have good reliability, achieving a high level of consistency and meeting the Cronbach's Alpha (CA) rule of thumb.

Table 2: Reliability Analysis of Items Promotion

Overall Cronbach's Alpha			Overall N of Items	
.831			7	
Item Statistics				
Items	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted
Promotion1: Promotions on Weibo influence my decision to buy products or services.	3.84	.837	40	.804
Promotion2: I consider promotions on Weibo to be great bargains.	3.65	.923	40	.812
Promotion3: Discount on Weibo make me interested in products that I have not originally planned to buy.	3.74	.923	40	.817
Promotion4: Flash sales on Weibo create a sense of urgency for me to buy products.	3.72	.967	40	.806
Promotion5: Buy-one-get-one-free on Weibo catch my attention.	3.94	.865	40	.800
Promotion6: Coupons offered by Weibo promotions can attract me.	3.77	.889	40	.802
Promotion7: Promotions on Weibo lead me to explore new products or brands.	3.74	.933	40	.816

Source: Authors' work

At the same time, this study also conducted validity testing on the items in the questionnaire using correlation analysis in SPSS software. As shown in Table 3, the analysis results indicate that the seven items related to promotion exhibited high levels of significance and good validity. This demonstrates that these items effectively measure the promotion variable, showing strong discriminative power and validity.

Table 3: *Pearson Correlation for Items Promotion*

	pro1	pro2	pro3	pro4	pro5	pro6	pro7
promotion1	1						
promotion2	.397**	1					
promotion3	.448**	.357**	1				
promotion4	.442**	.427**	.334**	1			
promotion5	.460**	.445**	.396**	.449**	1		
promotion6	.428**	.446**	.371**	.495**	.508**	1	
promotion7	.421**	.328**	.370**	.387**	.426**	.382**	1

**. correlation is significant at the 0.01 level (2-tailed).

Based on Table 4, the analysis results indicate that the Cronbach's Alpha value for visual appeal is .857. Therefore, the items in this study demonstrate good reliability, achieving a high level of consistency, in accordance with the empirical rule for Cronbach's Alpha (CA).

Table 4: Reliability Analysis of Items Visual Appeal

Overall Cronbach's Alpha	Overall N of Items
.857	7

Item Statistics

Items	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted
Visual appeal1: The layout of product information on Weibo is visually pleasing.	3.79	.769	40	.842
Visual appeal2: The color combinations of products displayed on Weibo are attractive and beautiful.	3.83	.889	40	.833
Visual appeal3: The products images displayed on the Weibo are very appealing.	3.93	.852	40	.838
Visual appeal4: The visual effect of product video on Weibo is very good.	3.86	.867	40	.831
Visual appeal5: The product animations on Weibo is creative and innovative.	3.81	.821	40	.843
Visual appeal6: Product images on Weibo are clear and high-quality.	3.81	.873	40	.833
Visual appeal7: The fonts and text styles of product display on Weibo catches my eye.	3.75	.850	40	.838

According to Table 5, the analysis results indicate that the 7 items related to visual appeal all demonstrate a high level of significance and good validity. This suggests that these items can effectively measure the visual appeal variable, exhibiting strong discriminative ability and validity.

Table 5: Pearson Correlation for Items Visual appeal

	VA1	VA2	VA3	VA4	VA5	VA6	VA7
Visual appeal1	1						
Visual appeal2	.439**	1					
Visual appeal3	.477**	.486**	1				
Visual appeal4	.419**	.531**	.440**	1			
Visual appeal5	.393**	.476**	.409**	.479**	1		
Visual appeal6	.415**	.503**	.506**	.570**	.392**	1	
Visual appeal7	.489**	.444**	.420**	.480**	.433**	.476**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Table 6 explains that the analysis results indicate that the Cronbach's Alpha value for positive user review is = .810. Therefore, the items in this study exhibit good reliability, achieving a high level of internal consistency, in accordance with the empirical rule of Cronbach's Alpha (CA).

Table 6: Reliability Analysis of Items Positive User Review

Overall Cronbach's Alpha			Overall N of Items	
.810			7	
Item Statistics				
Items	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted
Positive user review1: Positive user reviews on Weibo influence my decision to buy a product.	4.05	.815	40	.786
Positive user review2: I am more likely to trust a product that has many positive reviews on Weibo.	3.86	.972	40	.781
Positive user review3: Positive user reviews on Weibo give me confidence in the quality of the product.	3.84	.881	40	.778
Positive user review4: I often read positive reviews on Weibo before making a purchase decision.	3.75	.970	40	.791
Positive user review5: Positive recommendations from family, make me more likely to buy the product.	3.91	.893	40	.781
Positive user review6: Positive endorsements from friends, make me more likely to buy the product.	3.94	.888	40	.782
Positive user review7: Positive recommendations from influencers, make me more likely to buy the product.	3.60	.984	40	.799

As shown in Table 7, the analysis results indicate that the 7 items related to positive user review all exhibit high significance levels and good validity. This suggests that these items can effectively measure the positive user review variable, with strong discriminatory power and validity.

Table 7: Pearson Correlation for Positive User Review

	PUR1	PUR2	PUR3	PUR4	PUR5	PUR6	PUR7
Positive user review1	1						
Positive user review2	.388**	1					
Positive user review3	.488**	.562**	1				
Positive user review4	.309**	.493**	.348**	1			
Positive user review5	.402**	.313**	.385**	.337**	1		
Positive user review6	.392**	.336**	.363**	.343**	.558**	1	
Positive user review7	.319**	.286**	.302**	.322**	.399**	.380**	1
**. Correlation is significant at the 0.01 level (2-tailed).							

As presented in Table 8, the analysis results indicate that Cronbach's Alpha value for product feature is .835. Therefore, the items in this study demonstrate good reliability, achieving a high level of internal consistency, in accordance with the Cronbach's Alpha (CA) rule of thumb.

Table 8: Reliability Analysis of for Items Product Feature

Overall Cronbach's Alpha			Overall N of Items	
.835			7	
Item Statistics				
Items	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted

Product feature1: When I purchase products, I consider its design.	3.88	.816	40	.814
Product feature2: I pay attention to product functions that align with my preferences.	4.13	.809	40	.805
Product feature3: I consider the quality of products to meet my needs.	4.20	.833	40	.812
Product feature4: I will check the safety of products before purchase.	4.01	.898	40	.816
Product feature5: I consider the product's unique innovative features or technology.	3.83	.814	40	.831
Product feature6: The materials and composition of products on Weibo are clearly described and trustworthy.	3.99	.823	40	.804
Product feature7: The product's features on Weibo are very user-friendly and influence my purchasing decisions.	4.00	.804	40	.807

As presented in Table 9, the analysis results indicate that the 7 items related to product feature all demonstrate a high level of significance and good validity. This suggests that these items effectively measure the product feature variable, with strong discriminative power and validity.

Table 9: Pearson Correlation for Items Product Feature

	PF1	PF2	PF3	PF4	PF5	PF6	PF7
Product feature1	1						
Product feature2	.350**	1					
Product feature3	.366**	.602**	1				
Product feature4	.367**	.461**	.407**	1			
Product feature5	.476**	.334**	.234**	.347**	1		
Product feature6	.461**	.503**	.460**	.495**	.304**	1	
Product feature7	.478**	.458**	.472**	.392**	.356**	.515**	1

**. Correlation is significant at the 0.01 level (2-tailed).

In addition, the data illustrate in Table 10, the analysis results indicate that the Cronbach's Alpha value for price is = 0.809. Therefore, the items in this study demonstrate good reliability, achieving a high level of consistency, in accordance with the Cronbach's Alpha (CA) empirical rule.

Table 10: Reliability Analysis of for Items Price

Overall Cronbach's Alpha	Overall N of Items
.809	7

Item Statistics

Items	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted
Price1: Product' price heavily influences my decision to buy it on Weibo.	4.21	.793	40	.786
Price2: I feel tempted when the price of a product on Weibo is consistent with the product quality.	4.15	.871	40	.784
Price3: I feel like buying it immediately when price on Weibo is competitive with similar products.	3.90	.852	40	.784
Price4: I often compare prices between different sellers on Weibo before making a purchase.	4.18	.864	40	.787
Price5: Products' prices on Weibo are generally lower than on other platforms.	3.69	.953	40	.788
Price6: Products' prices on Weibo is transparent and clear.	3.60	.942	40	.776
Price7: Products' prices on Weibo are reasonable.	3.66	.855	40	.783

The data presented in Table 11, is the analysis results indicate that all seven items related to price exhibit high significance levels and good validity. This suggests that these items effectively measure the price variable, demonstrating strong discriminative power and validity.

Table 11: Pearson Correlation for Items Price

	PR1	PR2	PR3	PR4	PR5	PR6	PR7
Price1	1						
Price2	.459**	1					
Price3	.458**	.470**	1				
Price4	.489**	.518**	.291**	1			
Price5	.265**	.329**	.283**	.359**	1		
Price6	.329**	.288**	.390**	.303**	.463**	1	
Price7	.254**	.227**	.391**	.250**	.483**	.640**	1

**. Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 12, the analysis results indicate that the Cronbach's Alpha value for arousal is .845. Therefore, the items in this study exhibit good reliability, achieving a high level of internal consistency, in accordance with the empirical rule for Cronbach's Alpha (CA).

Table 12: Reliability Analysis of for Items Arousal

Overall Cronbach's Alpha			Overall N of Items	
.845			7	
Item Statistics				
Items	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted
Arousal1: I feel excited when I browse products that interest me on Weibo.	3.81	.829	40	.817
Arousal2: I feel excited when I explore new product categories on Weibo.	3.79	.900	40	.822
Arousal3: I feel excited when I see promotions (coupons, discount etc.) on Weibo.	3.83	.904	40	.824
Arousal4: I feel excited when I see visually appealing product displays.	3.87	.853	40	.826
Arousal5: I feel excited when I see products with positive user reviews.	3.79	.895	40	.828
Arousal6: I feel excited when I see innovative and unique product features.	3.74	.802	40	.830
Arousal7: I feel excited when I see products' price is advantageous compared to similar products.	3.95	.792	40	.821

Table 13 presented the analysis results that indicate 7 items related to arousal all exhibit high levels of significance and good validity. This suggests that these items can effectively measure the arousal variable, demonstrating strong discriminative ability and validity.

Table 13: Pearson Correlation for Items Arousal

	AR1	AR2	AR3	AR4	AR5	AR6	AR7
Arousal1	1						
Arousal2	.498**	1					
Arousal3	.526**	.412**	1				
Arousal4	.432**	.547**	.313**	1			
Arousal5	.466**	.430**	.422**	.417**	1		
Arousal6	.431**	.402**	.432**	.474**	.320**	1	
Arousal7	.448**	.397**	.563**	.414**	.478**	.419**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Moreover, Table 14 illustrate the analysis results indicate that the Cronbach's Alpha value for impulse buying intention is 0.843. Therefore, the items in this study demonstrate good reliability, achieving a high level of internal consistency, in accordance with the Cronbach's Alpha (CA) rule of thumb.

Table 14: Reliability Analysis of Items Impulse Buying Intention

Overall Cronbach's Alpha			Overall N of Items	
.843			7	
Item Statistics				
Items	Mean	Std. Deviation	N	Cronbach's Alpha if Item Deleted
Impulse buying intention1: I have the intention to buy items that I didn't originally intend to buy when I browse on Weibo.	3.75	.870	40	.819
Impulse buying intention2: If the product captures my interest, I will buy it impulsely even if it is not included in my shopping plan.	3.73	.969	40	.814
Impulse buying intention3: I have the inclination to purchase items outside my specific shopping goal when browsing Weibo.	3.78	.894	40	.823
Impulse buying intention4: I spontaneously buy things while browsing Weibo.	3.69	.898	40	.819
Impulse buying intention5: I will not resit the temptation to buy it when I see visually appealing products.	3.66	1.004	40	.815
Impulse buying intention6: I will have intention to buy products when I see products with positive user reviews.	3.71	.894	40	.832
Impulse buying intention7: I will have intention to buy products when i see innovative and unique product features.	3.77	.840	40	.824

The Table 15, presented the analysis results indicate that the seven items related to impulse buying intention all demonstrate high significance levels and good validity. This suggests that these items can effectively measure the impulse buying intention variable, possessing strong discriminative power and validity.

Table 15: Pearson Correlation for Items Impulse Buying Intention

	IBI1	IBI2	IBI3	IBI4	IBI5	IBI6	IBI7
Impulse buying intention1	1						
Impulse buying intention2	.463**	1					
Impulse buying intention3	.532**	.498**	1				
Impulse buying intention4	.395**	.532**	.353**	1			
Impulse buying intention5	.410**	.536**	.433**	.528**	1		
Impulse buying intention6	.444**	.348**	.363**	.393**	.341**	1	
Impulse buying intention7	.413**	.376**	.375**	.432**	.496**	.442**	1
**. Correlation is significant at the 0.01 level (2-tailed).							

4.2 Summary of Construct Validity

In summary, Table 16 presented the results of the pilot test indicate that the Pearson correlation coefficients for each variable range from 0.528 to 0.740, suggesting a high level of significance in the correlation between variables. This further confirms that the research tool demonstrates good validity in measuring these variables.

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Table 16: Summary of the Pearson Correlation of Variable

	PRO	VA	PUR	PF	PR	AR	IBI
Promotion	1						
Visual appeal	.544**	1					
Positive user review	.580**	.575**	1				
Product feature	.528**	.630**	.653**	1			
Price	.684**	.625**	.718**	.716**	1		
Arousal	.687**	.664**	.679**	.646**	.740**	1	
Impulse buying intention	.599**	.607**	.559**	.529**	.618**	.734**	1

**. Correlation is significant at the 0.01 level (2-tailed).

5. DISCUSSION AND CONCLUSION

This study contributes significantly to understanding consumer impulse buying intention on the Weibo social networking platform by developing and validating 49 measurement statements across six constructs: promotion, visual appeal, positive user reviews, product features, price, and impulse buying intention. Rooted in the unique characteristics of the Weibo platform, these items offer a tailored measurement instrument aligned with the behavioural and contextual realities of social commerce in China. Through rigorous pilot testing, the findings affirm the internal consistency and construct validity of each set of items, indicating that the instrument captures the nuanced effects of each variable on consumer behaviour. For example, the high reliability of promotion-related items supports previous literature asserting that temporary discounts and coupons are effective triggers of spontaneous purchases (Naeem, 2021). Likewise, visually appealing multimedia content was shown to be a powerful stimulus for attention and emotional arousal (Nguyen et al., 2023), aligning with broader visual marketing theories.

The implications of these findings are twofold: methodological and practical. From a methodological standpoint, this study advances the literature by offering a new, empirically tested measurement tool that can be adapted and validated across other social networking platforms. The instrument allows future researchers to more accurately capture the influence of specific marketing stimuli on impulse buying intention in various digital ecosystems. Moreover, the process of refining indicators based on Weibo's interface and user experience serves as a blueprint for contextualizing research instruments to suit specific platform dynamics.

Practically, the study provides actionable insights for marketers and e-commerce strategists. The validated instrument helps identify the key psychological and experiential levers that drive impulse purchasing on social platforms. Businesses can use these insights to tailor their digital campaigns, for instance, by amplifying the visual richness of product displays, curating user reviews strategically, and highlighting unique product features. In doing so, companies can stimulate consumer arousal and shorten the decision-making process—two essential characteristics of impulse buying behaviour. The tool also empowers businesses to monitor and optimize campaign effectiveness by tracking which factors most significantly influence spontaneous purchase behaviour among their target audiences.

Despite these contributions, the study is not without limitations. First, although the six constructs explored provide a robust starting point, they do not exhaust the full range of variables that influence consumer impulse buying. Contextual elements such as website usability, mobile app interface, convenience of transaction, and moderating variables like gender, income level, or product category were not considered. These variables may also exert significant influence, and their exclusion may have limited the explanatory power of the study. Future research should integrate these dimensions to enrich the conceptual model.

Second, the limited sample size, comprising 40 Weibo users from Nanjing, Jiangsu Province, aged 18 to 45—raises concerns about generalizability. The findings may not be reflective of broader demographic or geographic groups. Future research should expand the sample size and include diverse populations to enhance the external validity and applicability of the instrument across different contexts and user profiles.

In conclusion, while the study provides a reliable and contextually relevant tool for examining impulse buying on social media, further research is needed to refine the model and expand its applicability beyond the Weibo ecosystem.

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