Influence of New Media on the Psychological Needs of Consumers' Purchasing Decisions in the Online Environment

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Abstract. With the rapid development of the Internet and information technology, the emergence of new media platforms such as Microblogging, WeChat, and Jitterbug has made the speed and scope of information dissemination break the original limitations of time and space. This paper takes the psychological needs of consumers' purchase decisions in the context of new media as the research topic. Based on the review of new media and the theory of consumers' purchase decision, the influence of new media on the psychological needs of consumers is analyzed. A survey is conducted on the influencing factors of consumers' purchase decisions using new media, and research hypotheses are put forward. Questionnaires, SPSS data analysis, descriptive analysis and other methods are used to compare consumer purchase decision-making behaviors and psychological needs in different media environments, and relevant conclusions are drawn. First, the personalized push of new media platform has a greater positive impact on the psychological needs of consumers' purchase decisions. Second, other people's consumption experience in the context of new media has a greater impact on the psychological needs of consumers' purchase decisions. Third, ease of access to information affects the psychological needs of consumers' purchase decisions. If product-related information is easy to obtain, consumers will make judgment based on this information.

Keywords: New media, Consumer psychology, Purchase decision, Psychological needs, Online environment

1 Introduction

In recent years, new media forms have emerged under new technological support systems. With the rise of new media platforms such as Microblogging, WeChat, Jitterbug and the large-scale use of corresponding marketing methods, consumers are in the midst of an unprecedented flood of information [1]. According to Su Shicheng (2019), under the new environment of Web 2.0, the Internet has entered the era of new media communication, and new media communication mediums are gradually emphasized by enterprises [2]. The emergence of Microblogging, WeChat, forums and live broadcasting has greatly changed people's lives, affecting consumers' purchase decisions and psychological needs. The role of traditional media for enterprise marketing is getting smaller and smaller, and the new media

has brought a huge amount of information. Along with the rapid development of new media, marketing methods relying on new media also came into being, presenting the characteristics of diversified methods and forms [3]. Therefore, the study of consumers' purchase decision and psychological needs in the context of new media is particularly important.

1.1 Concept and characteristics of new media

New media refers to a news environment, mainly refers to the use of network technology and digital technology as the basis for media form, through the Internet, wireless communication networks, intelligent mobile terminals to provide users with information and entertainment services media form [4]. The new media environment has given rise to new media platforms corresponding to it, such as Microblogging, WeChat, Jitterbug and Little Red Book, etc., and the new media has changed a lot compared with traditional media.

The most important feature of new media is that it breaks down the barriers between media, blurring or even eliminating the boundaries between geographical areas and between information disseminators and receivers. It is mainly manifested in the following five aspects which are personalization, increased audience selectivity, diversity of expression, ease of retrieval and real time.

1.2 Psychological needs for consumer purchase decisions

In consumer behavior, scholars have different definitions of consumer behavior. Fazio and Williams (1989) believe that consumer behavior is all behaviors related to purchase activities [5]. Engel, Kollat & Blackwell (1984) believe that consumer behavior should encompass the entire process by which a consumer makes a purchase decision. It is a purchase process in that consumer personally participates, and the ideal consumer behavior should include factors that influence this process and interactions between these factors . It is the buying process in which the consumer is personally involved. Ideally consumer behavior should include the factors that influence this process and the influence of these factors on each other [6].

The purchase decision-making process consists of five main stages, which are, in order, problem identification, information collection, purchase option evaluation, purchase decision and post-purchase behavior. Problem identification is the confirmation of demand. Consumers recognize that they have a need and relate that need to a particular product or service, resulting in demand for that product or service. Information collection is the process of gathering information about the product or service through different channels and analyzing it in order to improve the rationality of the decision. The next step is to form various purchase plans based on the collected information, fully understand the attributes and price of the product or service, and confirm the purchase attitude, which is the plan evaluation stage. And then comes the most important part which is the purchase decision, choosing between different options and finalizing the purchase plan. Finally, there is the post-purchase evaluation, i.e., assessing the results of the purchase.

The psychological needs of consumers in purchasing decisions are characterized by five features, namely, purpose, process, subjective personality, situational and complexity. Therefore, it is not difficult to see that the process of consumer purchasing decision will be affected by a variety of factors, including the consumer's personal preferences, habits,

personality and income and other internal factors, as well as product attributes, brands, sales staff and discounts and other external factors.

2 Analysis of the impact of new media on consumers' psychological needs for purchase

2.1 Status and development trends of new media

As time advances, new media gradually occupy people's lives and become the main source of information. In the context of new media, the way and channels of information collection and broadcasting have changed [7]. According to Marcos Komodromos (2017), the audience range of new media marketing is getting wider and wider, and the marketing is oriented globally [8].

In terms of technology, the basic technology system that supports and enables the development of new media is constantly evolving and maturing, such as 5G, advanced algorithms from ByteDance, and so on, which enable the development of new media. In terms of terminals, there are also favorable conditions. At present, the number of smartphone users in China is the first in the world, and the number of Internet users has exceeded 900 million, which provides good conditions for the development of new media. In terms of content, the communication of new media is constantly enriched, from initial text, voice to current integration of text, audio, video as one of communication content. New media has brought consumers more spiritual enjoyment, so that its market continues to grow and develop. Social media marketing is also becoming more and more emphasized. It refers to the enterprise use of WeChat, Microblogging and QQ and other social media marketing activities [9]. In sum, new media has good conditions for development in China, and it is booming and the market is expanding.

The future of new media has the following five main trends which are fragmentation of information, creation of an all-media era, audience segmentation, gradual emergence of a wave of media mergers and acquisitions, and expansion of value [10].

2.2 The impact of new media change on consumer purchase psychology

The change of new media makes people's life style has changed a lot. First of all, the development of new media platforms enables people to buy what they need without leaving their homes, and the shopping mode has changed from offline shopping to online shopping. Access to information is becoming more and more convenient. This also makes consumers take more aspects into consideration when making purchase decisions. For example, when buying a pair of pants, they will consider its brand, material, price, evaluation, and other aspects.

The development of new media has also changed the way people communicate, from language, text to QQ, WeChat, and then live broadcasting, communication and interaction between people is more and more fast and convenient. People can turn themselves into self-media through smart mobile terminals to show their lives to the outside world. The popularization of new media is also a booster for the production and development of new technologies. At present, people can obtain the information they want through various live

broadcasting platforms, short video platforms, audio platforms, news platforms and other online media, all these making people's daily life more colorful [11].

3 Survey on factors influencing consumers' psychology of purchase decisions using new media

3.1 Formulation of hypotheses

Combined with the theoretical foundation mentioned in the previous section, the psychological needs of consumers' purchase decisions are chosen as the dependent variable. The sharing of other people on social platforms, personalized push on new media platforms, and convenient information access channels are chosen as the independent variables. It should be confirmed that these variables can affect the psychology of consumer purchase decision in the context of new media. The selected variables and corresponding indicators are shown in Table 1.

Table 1: Variables to be selected and corresponding indicators

Variable type	Variable name	Corresponding indicators
Implicit variable	Psychological needs in consumer purchase decisions	Consumers are willing to take buying decisions
Independent variable	New media influences	Personalized push on new media platforms
		Sharing the consumer experiences of others
		Convenient access to information

Based on Table 1, the following hypotheses are proposed:

H1: Personalized pushes on new media platforms have a positive effect on the psychological needs of consumers' purchase decisions.

H2: The consumption experience of others in the context of new media has a greater impact on the psychological needs of consumers' purchase decisions.

H3: Convenient access to information in the context of new media has a positive effect on the psychological needs of consumers' purchase decisions.

3.2 Questionnaire design process

The factors influencing consumers' purchasing decisions and the corresponding terms of each factor have been analyzed in the previous section. Next, the design of questionnaire will be carried out, and then the questionnaire will be supplemented and modified.

The questionnaire is divided into three main sections in total. The first part is designed to understand the respondents' use of new media platforms. The second part is the corresponding terms of factors influencing consumers' purchase decisions in the context of new media. The last part is basic information of consumers. The questionnaire design and analysis of basic data for this study were conducted on the Questionnaire Star website, and the questionnaires were released through QQ, WeChat and other mobile platforms as well as direct access to the

website, and 137 were effectively recovered, with a sample size that basically meets the requirements of the survey.

3.3 Reliability test

The reliability of questionnaire data was measured by analyzing the software using Cronbach's coefficient. Generally, when the reliability coefficient is less than 0.5, it means that the reliability is too low and the questionnaire needs a lot of corrections. When the reliability coefficient is between 0.5 and 0.8, it means that the questionnaire is set up in a reasonable way. When the reliability coefficient of questionnaire is greater than 0.8, the reliability of questionnaire is considered very good.

Table 2: Reliability statistics

Title	Correction term total correlation (CITC) □	Deleted alpha coefficients	Cronbach's alpha coefficient
Personalized push	0.678	0.806	
Consumer experience sharing	0.743	0.780	0.846
Easy access to information	0.640	0.823	

As can be seen in Table 2, the reliability coefficient value is 0.846, which is greater than 0.8, indicating that the reliability of the questionnaire is very good. Therefore, the descriptive entries should be retained, the design of the questionnaire is in line with the purpose of this paper, and the reliability level of research data is high enough for further analysis.

3.4 Validity test

To ensure the rationality of questionnaire design, factor analysis was used to test the data results of all measures and the validity of the categorization of the measures was tested in a similar way. In this study, KMO and Bartlett's spherical test were measured using the factor analysis module in SPSS analysis software. Table 3 shows the results of KMO measure and Bartlett's spherical test of the questionnaire.

Table 3: KMO and Bartlett's test

Kaiser-Meyer-Olkin metric of sampling adequacy		0.801
Bartlett's test of sphericity	Approximate chi-square	224.640
	df	6
	Sig.	0.000

As can be seen in Table 3 of Bartlett's test of sphericity, the KMO value of the variables is more than 0.8 and the significant level of Bartlett's test of sphericity is 0.000, which indicates that the level of significance is reached, proving that the questionnaire passed validity test.

3.5 Descriptive analysis

The survey data was analyzed descriptively in order to find out the inherent patterns in the survey.

Table 4: Results of descriptive analysis of basic indicators

Variant	Average	Standard deviation	Sample size N
Personalized push	3.745	1.015	137
Consumer experience sharing	3.562	1.097	137
Easy access to information	3.599	1.088	137

As can be seen from Table 4, there are no outliers in the current data. The data values all fluctuate within two standard deviations of the mean, and the mean value of personalized push is 3.745, which is not difficult to see that consumers' purchase decisions are greatly influenced by the personalized push of the new media platform. The mean value of personalized push is 3.745, which shows that consumers' purchase decisions are greatly influenced by personalized push on new media platforms. The mean value of consumer experience sharing and convenient information access is higher than 3.5, which indicates that the sample consumers pay some attention to the consumer experience shared by others and the convenient information access when they make purchasing decisions.

The answers obtained from the questionnaire were then statistically analyzed and presented below in the form of bar charts.
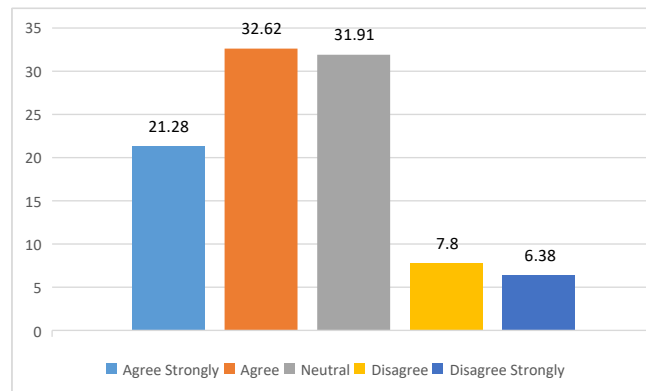

Figure 1: Personalized push in new media is more likely to generate consumer interest

Figure 1 shows the results of the questionnaire survey. 85% of the respondents said that personalized push on new media platform was more likely to arouse their interest in purchasing. Comparatively speaking, personalized push information is closer to consumers' preferences, and can quickly connect consumers' own needs with the brand's products through brand-user mutual perception to reach a purchase decision.
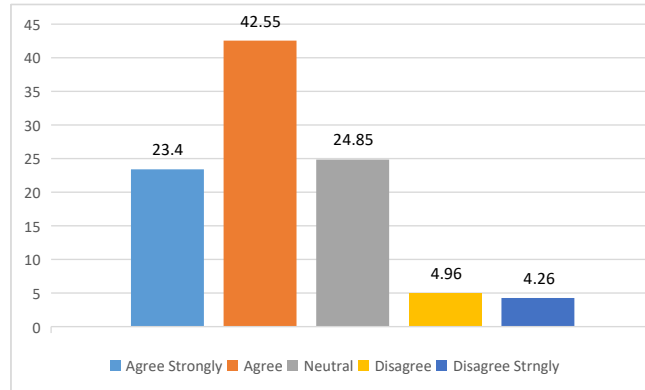
Figure 2: Sharing of others' consumption experiences influences your purchase decisions

According to Figure 2, it is easy to see that more than 90% of the respondents are influenced by the sharing of consumer experiences on social platforms and with friends around them, which is why there are many popular green consumer products that are popularized from Little Red Book. If it is a good shopping experience, it will have a positive influence on consumers' purchase decision.
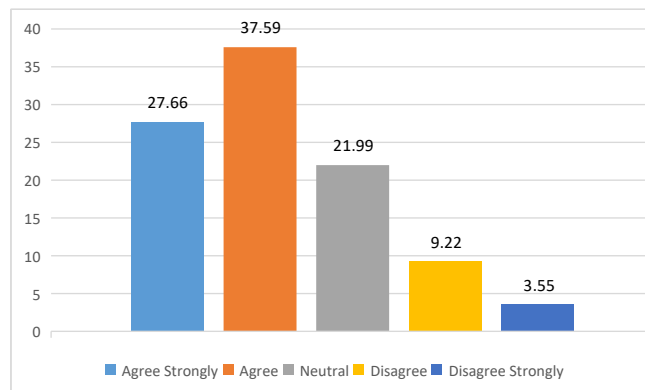

Figure 3: Multiple sources of product information are used in the purchase decision process

As can be seen from Figure 3, more than 85% of the respondents collect marketing information through multiple channels. And nowadays, with information overload and fierce competition in the market, if a product has little reputation and it is even difficult to search for relevant information, consumers are very likely to give up buying it.

4 Conclusions

After the analysis of questionnaire raw data using statistical software, based on the results of data analysis above, a brief summary of the hypotheses in this study is summarized in Table 5 below, followed by the results of the hypotheses also analyzed.

Table 5: Summary of assumptions

Number	Hypothetical content	Results
H1	Personalized push in the context of new media has a positive effect on the psychological needs of consumers' purchase decisions.	Established
H2	The consumption experience of others in the new media background has a greater impact on the psychological needs of consumers' purchase decision.	Established
H3	Convenient access to information in the context of new media has a positive effect on the psychological needs of consumers' purchase decisions.	Established

4.1 Personalized pushes on new media platforms have a greater positive impact on the psychological needs of consumers' purchase decisions

Nowadays, the development of technology has been able to support new media platform for consumers to personalized push, according to the user's previous browsing content to the user label, and then according to the label of the user to push relevant information. In the questionnaire, 86% of the respondents said that personalized push is more able to cause the consumer's desire to buy. In the enterprise marketing, personalized recommendation makes the enterprise's advertisement can better realize the accurate placement, and the consumers with potential needs can perceive each other with the brand and establish the connection.

4.2 Consumption experiences of others in the context of new media can have a greater impact on the psychological needs of consumers' purchase decisions

In the process of consumer purchase decision, post-purchase evaluation is the last link. In the context of new media, more and more people will share their own evaluation. When the user experience is good, they will recommend it on social platforms, recommend it to their friends, and expand their influence through new media platforms, which in turn will influence other consumers. The more good product reviews, the greater the possibility of consumer reference, and their willingness to buy will be stronger.

4.3 Ease of access to information affects the psychological needs of consumers in making purchase decisions

The results show that the authenticity of mobile short video marketing scene largely influences consumers' psychological demand tendency. It utilizes authentic filming techniques to bring the whole scene infinitely close to reality, so that the product is skillfully integrated into a story, which can make consumers feel immersive and understand the product better in emotional recognition.

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