

The Impact of Social Media on the Willingness of Young People to Consume Medical Skincare Products

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Abstract:

With the improvement of national living standards and the hot background of “beauty economy” in recent years, the concept of specialized and refined skincare has been increasingly accepted by more and more people. When people choose skincare products, they have shifted from generalization to specialization and refinement, and medical skincare products have gradually received public attention. This article explores the influencing factors of people’s willingness to consume medical skincare products from the perspectives of perceived value theory and consumption intention theory. Based on existing research, we have summarized the independent variables that affect consumer willingness to consume medical skincare products: content attractiveness, relationship strength, degree of involvement, cognitive trust, and subjective norms. The reliability and validity of the questionnaire were analyzed using SPSS, and structural equation modeling was conducted using AMOS. It was found that perceived value partially mediates the relationship strength, involvement level, cognitive trust, and consumption intention. Subjective norms directly affect consumption intention, while content attractiveness affects perceived value, but has no significant impact on consumption willingness.

Keywords:

Social Media, Medical Skincare Products, Perceived Value, Consumption Willingness

1. Introduction

In recent years, with the rise of the “beauty economy”, the consumption level of consumers has been continuously improving. More and more experts and exquisite skincare concepts have been accepted by more and more people. Therefore, in the selection of skincare products, it has also gone from being popular at the beginning to being professional and refined today. In recent years, the development of China’s skin care industry has been rapid, and its overall sales have shown a doubling trend, and there has been a trend of multi-level and diversification. [1]

Skincare products belong to a category of cosmetics, and cosmetics with cleaning and maintenance functions are generally referred to as skincare products, and more narrowly, refer to cosmetics that regulate skin texture, also known as medicinal cosmetics. [2] In the yet popular Chinese market, it is generally believed that skincare products sold in pharmacies are medicinal cosmetics. Medicinal makeup originated from a very popular concept internationally: medical skincare. In existing research, medical skincare products are rarely involved, and with the continuous prosperity of the market, such products will gradually receive attention from researchers.

This article assumes media exposure as the independent variable and the willingness of young consumers to consume medical skincare products as the dependent variable to design the framework of this study. This study explores the path of improving health awareness among young people, which can help improve the dissemination path of health science. Secondly, it delves into the field of medical skincare consumption, explores the consumption willingness and behavior of young people, and provides certain guiding significance for the development of related industries.

2. Research Assumption and Model Construction

2.1. Research hypothesis

The study attempts to apply the perceived value adoption model to systematically interpret the response of young audiences to the cognitive consumption of medical skincare products through the use of social media, and how it will affect their subsequent willingness and purchasing behavior?

2.1.1. Content attractiveness

The content of social media marketing directly affects consumers' perception of medical skincare product information. Different content can leave different impressions on consumers and generate different attractiveness. [3] Professional and authentic information will allow consumers to have a comprehensive evaluation, assess the value and risks of medical skincare products, and make choices. Interesting information, through animations or other more intuitive means, can help consumers understand the ways in which medical skincare products work and gain a more scientific understanding of skincare products. In summary, based on literature and theoretical models, the following hypotheses are proposed:

H1A: The attractiveness of media exposure content has a positive impact on perceived value.

H1B: The attractiveness of media exposure content has a positive impact on the willingness to consume medical skincare products.

H1C: Perceived value plays a mediating role between content attractiveness and willingness to consume medical skincare products.

2.1.2. Relations strength

Relationship strength is an important force in maintaining relationships between individuals on social media, which can influence consumer behavioral intentions. [4] Medical skincare related information will be transmitted to consumers through different online groups or individuals, and through word-of-mouth dissemination, it will affect consumers' views on medical skincare products. The strength of the

relationship in this article refers to the strength of the relationship between consumers and medical skincare product information publishers. Based on the hypothesis proposed in the literature, the relationship strength is related to medical cognition and consumption intention:

H2A: Relationship strength has a positive impact on perceived value.

H2B: The strength of the relationship has a positive impact on the willingness to consume medical skincare products.

H2C: Perceived value plays a mediating role between relationship strength and willingness to consume medical skincare products.

2.1.3. Involvement

Involvement, also known as participation, etc., refers to the perceived correlation between an individual and the object based on their internal needs, values, and interests. [5] The object can be a product, advertisement, consumption scenario, etc. Consumers are influenced by stimulating factors, which can lead to different levels of involvement. Consumers with high levels of involvement will pay attention to products or brands for a period of time, extensively gather information, and ultimately make decisions. Numerous studies have shown that consumer engagement has an impact on their purchase intention and final consumption decisions. Therefore, this article proposes:

H3A: Consumer engagement has a positive impact on perceived value.

H3B: Consumer engagement has a positive impact on the willingness to consume medical skincare products.

H3C: Perceived value plays a mediating role between involvement and willingness to consume medical skincare products.

2.1.4. Cognitive trust

Zaltman and Moorman pointed out in 1988 that trust is a state of relationship between individuals and organizations, which affects expectations of each other, behavior, assessment of their trustworthiness, and foresight of their reactions in uncertain environments [6]. The level of trust consumers have in the skincare information they come into contact with is also a factor that affects their willingness to consume. Therefore, regarding the relationship between consumer cognitive trust in skincare information, consumer medical cognition, and consumer willingness, this article proposes the following hypotheses:

H4A: Consumer cognitive trust has a positive impact on perceived value.

H4B: Consumer cognitive trust has a positive impact on the willingness to consume medical skincare products.

H4C: Perceived value plays a mediating role between cognitive trust and willingness to consume medical skincare products. H4A: Consumers' cognitive trust has a positive impact on perception value.

2.1.5. Subjective norms

Subjective norms refer to the perceived social pressure of executing or not executing a certain behavior, which reflects the influence of social groups such as the executor's family and friends on their behavioral decisions. [7] In the collectivist

environment of China, emphasis is placed on harmonious interpersonal relationships with others, and when doing things, one will fully consider the habits or influences of others. Therefore, consumer behavior will be greatly influenced by social factors. Therefore, the impact of subjective norms on medical use on consumer willingness is worth examining. This article makes the following assumptions:

H5: Consumer subjective norms have a positive impact on the willingness to consume medical skincare products.

2.1.6. Perception value and consumption willingness

Customer perception value is the evaluation and preference formed by customers regarding the use and service of medical skincare products based on a balance of benefits and losses. [8] It is an important prerequisite for determining customer satisfaction. Zeithaml has pointed out through extensive empirical research that the higher the perceived benefits of a product or service for consumers, the higher their perception of value, and a higher perceived value will increase their willingness to purchase the product. Therefore, this article makes the following assumptions:

H6: Perceived value has a positive impact on the willingness to consume medical skincare products.

2.2. Model Construction

This article divides the independent variables into five variables: content attractiveness, relationship strength, degree of involvement, cognitive trust, and subjective norms. The mediating variable is medical cognition, and the dependent variable is consumption intention. Based on the reference of consumption intention, perceived value model, and planned behavior theory model, combined with the characteristics of medical skincare products themselves, this article constructs a model framework for this study, which is the theoretical model of the influencing factors of social media on the consumption intention of young medical skincare products, as shown in Figure 1. The relationship between research content attractiveness, relationship strength, degree of involvement, cognitive trust, subjective norms, Perception value, and consumption willingness.

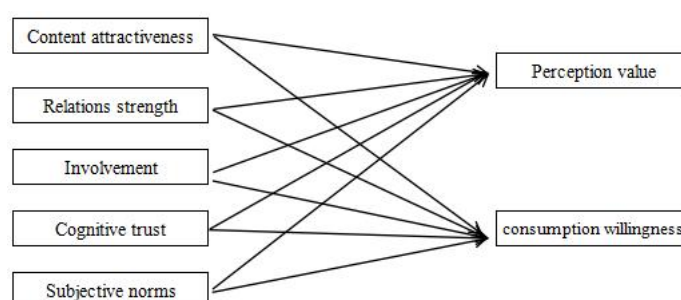


Figure 1. Theoretical model of factors Influencing consumption intention of medical skincare products.

2.3. Survey questionnaire design

In order to verify the theoretical model of the factors influencing the willingness of young people to consume medical skincare products through social media and ensure the reliability of empirical research results, the author referred to relevant research by domestic and foreign scholars and designed a survey questionnaire on the impact of social media on the willingness of young people to consume medical skincare

products. The questionnaire consists of three parts: questionnaire explanation, user basic information, and factors influencing the willingness to consume medical skincare products, with a total of seven variables, Design 3-7 questions for each variable, totaling 35 questions. The questionnaire adopts the Likert scale, which ranges from completely non compliant to fully compliant on 5 levels. Respondents make choices based on their actual situation. Each item in the questionnaire is designed based on relevant research results both domestically and internationally. There are slight wording modifications in the questions to adapt to the research background and user understanding of this article.

This survey was conducted through online questionnaire distribution for data collection. In order to ensure the effectiveness of questionnaire data collection, 20 audiences were selected for pre filling before the official distribution of the questionnaire. Based on the collected trial survey data results, data analysis shows that this questionnaire can effectively collect the required data for this study, ensure the rationality and authenticity of the data, and assist in model validation for this study. A total of 351 survey questionnaires were distributed and 350 were collected in this survey. There were 345 valid samples, and the effective questionnaire rate was 98.29%.

3. Data Analysis

3.1. Sample selection

This study mainly focuses on young people, therefore the age range is defined between 18 and 40 years old. From the descriptive statistical results of the survey samples, 79.71% of the surveyed age group is between 18 and 25 years old, 10.43% is between 26 and 30 years old, 5.22% is between 31 and 35 years old, and 1.45% is between 36 and 40 years old. That is to say, 96.81% of the surveyed age group is between 18 and 40 years old, indicating that the sample is representative. 80.87% of the respondents have used medical skincare products, and the scientific validity of the research results can be guaranteed to a certain extent. From the results of the survey questionnaire collection, it can be seen that out of the 345 valid samples, 279 people have used medical skincare products, accounting for 80.87%, indicating that this type of skincare product still has a certain popularity and usage rate. Therefore, it is necessary to study the consumption intention of this type of skincare product.

Table 1. Survey Sample Description Statistics.

Statistical Magnitude		Frequency	Ratio
gender	male	70	20.29%
	female	275	79.71%
age	Under 18 years old	10	2.90%
	18-25	275	79.71%
	26-30	36	10.43%
	31-35	18	5.22%
	36-40	5	1.45%
	41-45	0	0%
	Over 45 years old	1	0.29%
Educational background	High school and below	9	2.61%
	Junior college	31	8.99%
	Undergraduate	188	54.49%
	master	111	32.17%

	Dr.and above	6	1.74%
Have you used medical skin care products?	yes	279	80.87%
	no	66	19.13%

3.2. Reliability and validity testing

In order to analyze the reliability of the sample data obtained from the survey questionnaire, this study conducted reliability and validity tests using SPSS 27.0 software. The factor analysis results of social media on the willingness of young people to consume medical skincare products indicate that the overall data is suitable for reliability analysis, as shown in Table 2. By testing the overall reliability of the scale, the reliability of 35 questions was evaluated α The coefficient is 0.965, based on standardized terms α The coefficient is 0.965, indicating that the overall reliability of the scale is very good, and the stability and consistency of the scale are good, which can be further analyzed.

In order to test the construct validity of the scale, factor analysis was conducted on the scale data, mainly using exploratory factor analysis method. KMO and Bartlett tests were conducted on the overall scale, as shown in Table 3. The KMO value is 0.960, close to 1, and the Bartlett's sphericity test value is 8435.328, with a corresponding significance less than 0.05. The null hypothesis is rejected, indicating that the scale is suitable for factor analysis.

Table 2. Overall reliability analysis.

Item dimension	Klonbach Alpha	Klonbach Alpha based on standardized terms	Number of items
Global scale	0.965	0.965	35

Table 3. KMO and Bartlett tests.

KMO sample appropriateness measure		.960
Bartlett sphericity test	Approximate chi-square	8435.328
	DOF	435
	Significant	.000

3.3. Confirmatory factors and model testing

In order to verify the consistency between the theoretical model and empirical data, and to explore the inherent compatibility between the model and the data, this paper uses AMOS and SPSS software to conduct confirmatory factors through structural equation modeling to verify the authenticity and applicability of the theoretical model. Through calculation, the revised indicators are shown in Table 4. According to the data results, the reliability (CR value) of each combination is greater than 0.6, and the AVE is greater than 0.5, indicating that all factors have good convergent validity.

Table 4. Convergence validity analysis.

Latent variable	Observed variable	Factor load	SE	CR	AVE
Content attractiveness	SJHQ4	0.711	0.111	0.832	0.5544
	SJHQ3	0.822	0.109		
	SJHQ2	0.754	0.104		
	SJHQ1	0.684			
Relations strength	MJSY5	0.636		0.8749	0.5848
	MJSY4	0.805	0.143		
	MJSY3	0.814	0.144		
	MJSY2	0.78	0.129		

	MJSY1	0.775	0.126		
Involvement	XXXZ5	0.842		0.8981	0.6386
	XXXZ4	0.755	0.068		
	XXXZ3	0.787	0.064		
	XXXZ2	0.763	0.066		
	XXXZ1	0.844	0.072		
Cognitive trust	GRGS5	0.851		0.8831	0.6543
	GRGS4	0.841	0.062		
	GRGS2	0.772	0.059		
	GRGS1	0.768	0.059		
Subjective norms	YYX5	0.549		0.8409	0.5753
	YYX3	0.787	0.163		
	YYX2	0.793	0.177		
	YYX1	0.867	0.17		
Perception value	SYXG1	0.754		0.8749	0.5011
	SYXG2	0.657	0.092		
	SYXG3	0.69	0.095		
	SYXG4	0.712	0.108		
	SYXG5	0.634	0.105		
	SYXG6	0.797	0.093		
	SYXG7	0.698	0.099		
consumption willingness	XFYY1	0.708		0.811	0.5181
	XFYY2	0.67	0.1		

This study used AMOS software for structural equation modeling and validated the relationships between these variables. Based on the assumptions of this study, a complete structural equation model to be verified is established using AMOS on the basis of the conceptual model proposed. Substitute the data into the structural equation model shown in Figure 2. The fitness indicators of the model are shown in Table 5. It can be seen that in this study model, NFI, IFI, GFI, CFI indicators are all greater than 0.8, and PNFI, PCFI, PGFI and other indicators are all greater than 0.5, meeting the fitting standard. The discriminant validity is shown in Table 6. According to the data in the table, the AVE square root values of the latent variables are all greater than the correlation coefficient values between the two latent variables, indicating that the model has good discriminant validity. Based on the indicator values in each chart, overall, all indicators meet the standards and the model has good adaptability.

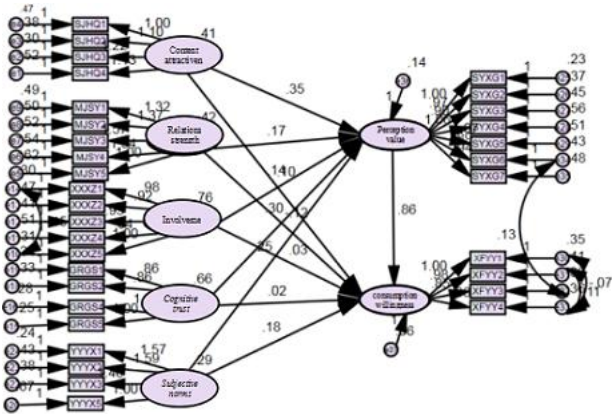


Figure 2. The impact model and standardization coefficient of social media on the willingness of young people to consume medical skincare products.

Table 5. Model adaptation index testing.

Statistical test	Absolute adaptation index				Value -added adaptation index			Sim plicity adaptation index		
	χ^2/df	RMSEA	GFI	AGFI	NFI	IFI	CFI	PNFI	PCFI	PGFI
Adaptation standards	<3	<0.08	>0.8	>0.8	>0.8	>0.8	>0.8	>0.5	>0.5	>0.5
Parameter of this m odel	2.498	0.074	0.811	0.81	0.826	0.856	0.878	0.76	0.807	0.67

Table 6. Differential validity analysis.

Latent variable	1	2	3	4	5	6	7
Content attractiveness	0.758						
Relations strength	0.332	0.809					
Involvement	0.232	0.382	0.799				
Cognitive trust	0.322	0.32	0.384	0.765			
Subjective norms	0.24	0.382	0.335	0.367	0.745		
Perception value	0.247	0.444	0.222	0.204	*	0.708	
consumption willingness	*	*	0.221	0.206	0.437	0.88	0.72

3.4. Parameter estimation and hypothesis testing

This study estimated the path coefficient values between various factors, as shown in Tables 3-7. Therefore, the model of the impact of social media on the willingness of young people to consume medical skincare products proposed in this study has been validated. Out of the 14 hypotheses proposed, 12 hypotheses are supported, while 2 hypotheses are not supported.

Table 7. Model validation.

Hypothesis	Standard Regression Coefficient	p-Value	Conclusion
H1A: The attractiveness of media exposure content has a positive impact on perceived value.	0.221	***	Assumption holds
H1B: The attractiveness of media exposure content has a positive impact on the willingness to consume medical skincare products.	-0.012	0.621	assumption fails
H1C: Perceived value plays a mediating role between content attractiveness and willingness to consume medical skincare products.			assumption fails
H2A: Relationship strength has a positive impact on perceived value.	0.235	***	Assumption holds
H2B: The strength of the relationship has a positive impact on the willingness to consume medical skincare products.	0.138	***	Assumption holds
H2C: Perceived value plays a mediating role between relationship strength and willingness to consume medical skincare products.			Assumption holds

H3A: Consumer engagement has a positive impact on perceived value.	0.216	***	Assumption holds
H3B: Consumer engagement has a positive impact on the willingness to consume medical skincare products.	0.325	***	Assumption holds
H3C: Perceived value plays a mediating role between involvement and willingness to consume medical skincare products.			Assumption holds
H4A: Consumer cognitive trust has a positive impact on perceived value.	0.163	***	Assumption holds
H4B: Consumer cognitive trust has a positive impact on the willingness to consume medical skincare products.	0.156	***	Assumption holds
H4C: Perceived value plays a mediating role between cognitive trust and willingness to consume medical skincare products.			Assumption holds
H5: Consumer subjective norms have a positive impact on the willingness to consume medical skincare products.	0.102	***	Assumption holds
H6: Perceived value has a positive impact on the willingness to consume medical skincare products.	0.126	***	Assumption holds
annotation: ***Indicates a significance level of 0.001			

4. Research Conclusions and Discussions

Based on the analysis of the structural equation model and the output data, it is found that:

This article draws on academic research on consumer willingness and perceived value, and summarizes six major influencing factors: content attractiveness, relationship strength, involvement, cognitive trust, subjective norms, and perceived value. Among them, perceived value acts as an intermediary to influence.

Content attractiveness has no direct impact on consumer willingness. Consumers are more skeptical of skincare advertisements with well crafted content and trust the true evaluations of those around them. [9] However, whether the content of medical skincare product information is true or interesting can make consumers have different perceptions of medical skincare products, and subsequent consumption attitudes need to be influenced by other factors.

The strength of relationships has a significant positive impact on perceived value. Increased perception of the value of medical skincare products through interaction with bloggers and commenters on social media platforms. Communication between consumers and people with close relationships can bring each other closer and increase resonance between both parties.

The degree of involvement has a significant positive impact on perceived value and willingness to consume. Some consumers come into contact with information about medical skincare products due to hearsay or passive reception. Consumers who have a deep understanding of medical skincare products will actively search for information related to medical skincare products, compare the characteristics and advantages and disadvantages of different products, and refer to the opinions given by netizens. They

can have a clear understanding of the risks and benefits of medical skincare products, and have a good understanding of the efficacy of medical skincare products. The effect will also be objectively evaluated. Therefore, consumers with high involvement are more willing to accept medical skincare products and have a higher level of perceived value.

Cognitive trust also positively affects perceived value and willingness to consume. When it comes to medical skincare products, it is believed that they are only used due to skin diseases, which poses significant risks. This fully demonstrates that consumers have insufficient understanding and trust in medical skincare products. Increasing consumer trust in medical skincare products can stimulate their willingness to consume and also increase their perceived value level towards medical skincare products.

Subjective norms have a significant positive impact on consumer willingness. The negative evaluations of medical skincare products by people around us have created a negative impression of them. Due to the influence of conformity psychology, consumers are more inclined towards things that the public accepts and loves. [10] From this perspective, medical skincare products still have a long way to go.

This article also has certain limitations in its research. In terms of sample selection, the main survey subjects are young people aged 18-40, and the source and population of sample data are relatively single. In future research, sample collection and data analysis will be conducted again for adolescents and middle-aged and elderly individuals, and compared with the results of this study to improve the universality of the model constructed by the research institute.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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References

- [1] Wang, X.W.; Qiu, C.C.; Li, Y.Q.; Meng, Y. Urchual public health incident users' rumor information dissemination willingness research. *Modern intelligence*, 2022, 42(01), 87-96+176.
- [2] Kong, L. Research on Factors of Factors of Factors of Female Medical Consumption Will Consumption after 90s. Jinan University, 2020.
- [3] Yan, J.S. A Study on the Dimensions of Customer Value Composition in B2C Mode. Shandong: Shandong University, 2008.
- [4] Bristor, J.M. Enhanced explanations of word-of-mouth communications: The power of relationships. *Research in consumer behavior*, 1990, 4, 51-83.

- [5] Juliet, Yuan, D.H.; Zhang, J.Y. The impact of the quality of online user reviews and reviewers on consumers' willingness to buy-product involvement. *Management review*, 2017, 29(2), 88-92.
- [6] Davis, G.; Chun, R.; Vinhas, D.S., ET AL.A Corporate Character Scale to Assess Employee and Customer Views of Organization Reputation. *Corporate Reach Review*, 2004, 7(2), 125- 47.
- [7] Xie, F.H. Research on the cause, dimension and results of consumer trust-theoretical and experience research based on TV purchases. Zhejiang: Zhejiang University, 2005.
- [8] Zhang, X.X.; Chen, S.B. Self-decision sense and emotional easy sensitivity to share their willingness on social media audiences. *Modern Communication (Journal of Communication University of China)*, 2022, 44(06), 132-142.
- [9] Cheng, S.L. A Study on the Impact of College Students' Intention to Use Sports APPs from the Perspective of Perceived Value Theory. Nanchang: Jiangxi University of Finance and Economics, 2019.
- [10] Zhong, K. Research on the Impact of Perceived Value of Online Consumers on Purchase Intention. Shenyang: Liaoning University, 2013.



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