Impact of Product Story Narrative Type on Consumers' Purchase Intention

Yuyang Xiao^{1, a}, Shijia Zhu ^{1, b}, and Jingjie Cheng^{*, 2, c}

¹School of Management, Wuhan University of technology, Wuhan, Hubei, China;

²School of Art, Design and Media, Wuhan Huaxia University of technology, Wuhan, Hubei, China.

^a xiaoyuyang@whut.edu.cn, b 269739@whut.edu.cn, c 244321660@qq.com

Abstract. As consumers are increasingly presented with a plethora of products to choose from, product stories have emerged as a vital marketing tool for capturing their attention and encouraging purchasing decisions. Drawing upon consumer perception theory, narrative transportation theory, and involvement theory, this study examines the impact of three narrative types of product stories - authenticity, conciseness, and humor - on consumers' purchase intentions, while considering the moderating roles of product involvement and purchase decision involvement. Based on the findings of this study, we provide recommendations for corporate marketers to enhance their marketing strategies.

Keywords: product story; purchase intention; involvement; narrative transportation.

1. Introduction

Nowadays one of the marketing problems in the digital age is how to capture consumers' attention and transform it into purchasing power. Studies have shown that narrative information is an effective means of capturing consumers' attention, enabling them to become fully engrossed in a story, forget their surroundings, and fully experience the narrative [1]. This has led to the gradual incorporation of storytelling into marketing, as a way to establish a relationship between brands and consumers. Current research in this field primarily focuses on the impact of brand narratives on consumers' brand attitudes or brand cognition [2,3]. However, there are few studies that have examined the impact of product stories on consumers independent of brand narratives. Furthermore, previous research has found that the types, characters, scenes, and plots of stories, as well as consumers' familiarity with them, can all impact their willingness to adopt story products [4,5]. However, factors such as consumers' own purchasing decision-making characteristics and attention to products can also affect their acceptance of stories, yet few scholars have investigated this aspect to date.

Building on these insights, this study leverages narrative transportation theory and consumer perception theory to investigate the impact of three distinct narrative types - authentic, humorous, and concise - on consumers' purchase intention. Additionally, the study incorporates the theory of involvement to explore how product involvement and purchase decision involvement moderate the influence path of these narrative types.

2. Literature Review and Hypotheses

2.1 Product story and purchase intention

Stories originated from the field of narrative research and were first introduced to enterprise management by Mitroff and Kilmann in 1975. They found that the proper use of story management can enhance the operational efficiency of enterprises [6]. Papadatos has argued that marketers' stories are essentially life stories of product experiences that convey the core values of enterprises, thereby enhancing consumers' emotional experiences and establishing a positive brand image in consumers' minds [3]. Story marketing in the experience era aims to engage consumers by enabling them to immerse themselves in story situations, internalize the hero's understanding and judgment

of products, and form emotional ties with products. This helps to arouse consumers' willingness to buy [7]. However, different ways of telling stories can have varying effects on consumers. Chiu HC and other scholars have found that for experiential products, the authenticity and relatability of stories are more important in enhancing brand attitude, while for search products, the simplicity and humor of stories are more critical [5]. These studies suggest that different narrative types of product stories have distinct influences on consumers' purchasing decisions. Therefore, investigating the internal mechanisms underlying these effects is crucial.

2.2 The mediating roles

Consumer functional value refers to the perceived utility of a product based on factors such as its price, quality, and expected performance [8]. Stories can convey hidden information about a product's quality and function through the reactions of its hero character, which can create a positive initial impression of the product's cost performance, quality, and function and lead to a purchase intention. Different narrative forms may influence the information content and credibility received by consumers, ultimately affecting their purchase intention. Therefore, this research proposes the following assumptions:

H1: Consumers' perceived functional value (PFV) mediates the impact of authentic/humorous/concise product stories on their purchase intention (PI).

Consumer emotional value refers to the utility reflected in the feelings or emotional states that products or stories evoke in consumers during the purchase process [8]. Previous studies, such as those conducted by Wang Rong and others, found that consumers' patriotic feelings have a positive impact on their willingness to buy domestic products [9]. They proved that when consumers read product stories, they may be emotionally affected by the emotions in the stories, leading to a purchase intention.

H2: Consumers' perceived emotional value (PEV) mediates the impact of authentic/ humorous product stories on their purchase intention (PI).

While narrative transportation was originally studied in psychology and narratology, it can also be applied in marketing to influence consumers' beliefs, attitudes, and intentions. Research has shown that narrative can change consumers' purchasing decisions by influencing their emotions and shortening the psychological distance from brands, leading to purchase intention. Research by scholar Tang Shan indicates that consumers can generate purchase intention by perceiving the value of brand storytelling, thus reducing the psychological distance between themselves and the brand [10]. Therefore, the study hypothesizes that product stories can influence consumers' purchase intention through narrative transportation, and puts forward the following assumptions:

H3: Narrative transportation (NT) mediates the influence of authentic/humorous/concise product stories on consumers' purchase intention (PI).

2.3 The moderating roles

Product involvement refers to the degree of correlation between consumers and products, which is influenced by their own needs, values, interests, and motivations [11]. For instance, Huang Liyao found that tourism involvement and product involvement can influence tourism consumers' willingness to purchase cultural and creative products through perceived value[12]. Similarly, Yang Wen 'e's research shows that the interest and symbolic meaning of information gathering in product involvement significantly impact consumers' product value perception[13]. Based on these findings, the present study proposes that product involvement affects consumers' purchase intention by influencing their perceived value and the degree of narrative transportation. The study thus posits the following assumptions:

H4: The moderating effect of product involvement (PRI) on the mediating role of consumers' perceived functional value (PFV) is present in authentic/humorous/concise product stories.

H5: The moderating effect of product involvement (PRI) on the mediating role of consumers' perceived emotional value (PEV) is present in authentic/humorous/concise product stories.

H6: The moderating effect of product involvement (PRI) on the mediating role of narrative transportation (NT) is present in authentic/humorous/concise product stories.

Purchase decision involvement refers to the level of attention that consumers pay to a particular purchase decision or activity [11]. Studies have shown that purchase decision involvement affects consumers' purchasing decisions. For instance, research by Liu Qina indicates that the positive influence of product attitude on purchase intention is weakened by purchase decision involvement [14]. Therefore, the research hypothesizes that the degree of purchase decision involvement will impact consumers' purchase intention by influencing their value perception and narrative transportation when reading a product story.

H7: The moderating effect of purchase decision involvement (PDI) on the mediating role of consumers' perceived functional value (PFV) is present in authentic/humorous/concise product stories.

H8: The moderating effect of purchase decision involvement (PDI) on the mediating role of consumers' perceived emotional value (PEV) is present in authentic/humorous/concise product stories.

H9: The moderating effect of purchase decision involvement (PDI) on the mediating role of narrative transportation (NT) is present in authentic/humorous/concise product stories.

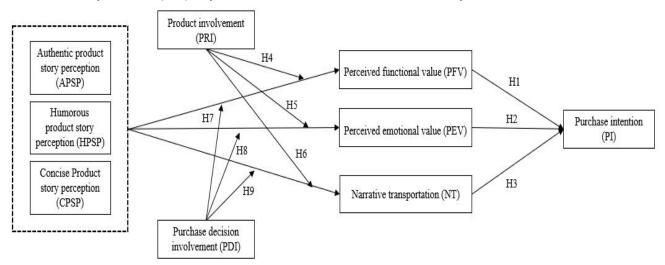


Fig. 1 Conceptual framework

3. Research Design

3.1 Stimuli development

Based on the experience of an ordinary consumer in purchasing skin care products, this study focuses on the impact of authentic, humorous, and concise product stories on consumers' purchase intention. The efficacy of skin care products is closely related to consumers' functional and emotional perceptions [15], making them particularly susceptible to story marketing. Therefore, skin care products are an ideal product category for variable measurement, and the collected sample data is expected to show significant individual differences.

Furthermore, the study defines three types of product stories: authentic, humorous, and concise. Authentic product stories provide real information such as the name and identity of the protagonist and the environmental background, while the other two types do not mention this information. Humorous product stories use witty language and humor in their titles and expressions, while the other two types use plain titles and expressions. The concise product story is about 150 words, while the other two types are around 300 words in length [5].

3.2 Measurement

The research conducted variable measurement through a questionnaire, which consisted of 28 measurement items. The Likert Five-Scale was used to measure the variables, where 1-5 points represented 5 grades ranging from totally inconsistent to completely consistent. The measurement items of the questionnaire were adapted from existing research and were as follows: Perceived pandering degree of product narrative type was measured from Chiu HC et al [5]. Product involvement and purchase involvement was measured from Zaichkowsky et al. [11]. Perceived functional and emotional value was measured from Cui, Z. F. et al. [16]. Narrative transportation was measured from Oh, S. et al. [17]. Purchase intention was measured from Liu, Q. [14].

3.3 Sample

The questionnaire was created using the Questionnaires website in April 2022, and three versions of the questionnaire were distributed via social platforms, each featuring a different type of product story: authentic, humorous, and concise. Other than the variations in the product stories, all other questions were identical across the three versions. Sample information is presented in Table 1. Table 1 reveals that the respondents closely resemble typical consumers of skin care products, predominantly comprising young women aged 18-30 who are students or office workers. The sample population also displays a high level of education and has sufficient income to cover living expenses. Given these characteristics, it can be inferred that the sample data is representative of the broader population of skin care product consumers.

Table 1. Demographics information

Measure	Authentic story	Humorous story	Concise story	
Number of valid questionnaires	1 148 (82 2%)		153 (85.5%)	
Gender	Male (24.3%)	Male (25%)	Male (32.7%)	
	Female (75.7%)	Female (75%)	Female (67.3%)	
Age	18-25 (60%)	18-25 (60.8%)	18-25 (62.7%)	
	26-30 (30%)	26-30 (25.7%)	26-30 (22.9%)	
Education level	Undergraduate (83.8%)	Undergraduate (82.4%)	Undergraduate (83%)	
Career	Student (59.4%)	Student (58.1%)	Student (57.5%)	
	Worker (29.1%)	Worker (37.2%)	Worker (28.8%)	
Monthly living expenses(Y)	1k-3k (55.4%)	1k-3k (53.4%)	1k-3k (51%)	
	3k-5k (16.9%)	3k-5k (18.2%)	3k-5k (17%)	

4. Data Analysis and Results

4.1 Measurement reliability and validity

The reliability of the questionnaire was tested using Cronbach's α value. The analysis revealed that the reliability coefficients for all variables were greater than 0.8 (as shown in Table 2), indicating good reliability of the questionnaire. Factor analysis was also conducted to assess the overall validity of the data collected through the questionnaire. The KMO was 0.926, and the Bartlett spherical test chi-square was 2992.251, with a significance P value of 0.000, indicating high overall validity of the data. From a content validity perspective, the research variables were measured using a maturity scale, which did not require principal component analysis. From a structural validity perspective, the study examined convergence validity and discrimination validity. The results of the convergence validity analysis (as shown in Table 2) indicated that the CR of APSP(authentic product story perception), PRI, PDI, PFV, PEV, NT and PI was greater than 0.8, and AVE was greater than 0.5, meeting the requirements for good convergence validity. The results

of the discrimination validity analysis (as shown in Table 2) revealed that the values on the diagonal (represents the square root of the corresponding AVE) were larger than other correlation coefficient, indicating good discrimination validity overall. Since the variables of humor scale and concise scale were the same as those of the real scale in this study, the reliability and validity tests were not repeated here.

Table 2.	Results of Reliability	z and Validity	Tests and Correlation Coefficient Matrix
1 4010 2.	ixesums of ixemacini	and vanding	rests and Constantion Coefficient Matrix

Variable s	Ite ms	α	AVE	CR	APSP	PRI	PDI	PFV	PEV	NT	PI
APSP	3	0.89 8	0.74 6	0.89 8	0.863						
PRI	4	0.80 5	0.54	0.82	0.353**	0.736					
PDI	4	0.83 8	0.57 0	0.84	0.209*	0.542*	0.755				
PFV	4	0.89 6	0.69	0.89 8	0.752**	0.367*	0.304*	0.830			
PEV	3	0.82 6	0.61 6	0.82 7	0.736**	0.376*	0.276*	0.813	0.785		
NT	5	0.87	0.58 2	0.87 4	0.643**	0.385*	0.289*	0.696 **	0.715*	0.76	
PI	4	0.90 5	0.70 6	0.90 6	0.765**	0.316*	0.241*	0.819 **	0.792*	0.76 7**	0.84

PS: ** represents P < 0.01, * represents P < 0.05, The diagonal represents the square root of the corresponding AVE.

4.2 Mediation effect test results

To verify the mediating role of PFV, PEV and NT, MPLUS software was used to calculate the path coefficient β , T values of related variables in the mediating model, and the R-square value of the model. The results are presented in Table 3.

Results indicate that PFV, PEV and NT play a partial mediating role in PI in authentic product stories, and play a completely mediating role in PI in humorous product stories. PFV and NT play a completely mediating role in PI in the concise product story model. The R-square explanatory power in authentic, humorous, and concise product stories is 0.764, 0.700, and 0.516, respectively. This suggests that the overall interpretation of authentic and humorous product stories is better.

Table 3. Mediation Effect Test Result

Influence	Authentic product story		Humorous	s product story	Concise product story		
	β	t	β	t	β	t	
PSP→PI	0.237**	3.163	-0.002	-0.026	0.024	0.354	
PSP→PFV	0.752***	17.09	0.624***	10.03	0.410***	4.587	
PSP→PEV	0.736***	15.09	0.682***	11.874	0.350***	3.897	
PSP→NT	0.643***	10.944	0.722***	14.687	0.354***	4.273	
PFV→PI	0.348***	4.745	0.345***	3.252	0.372***	3.466	
PEV→PI	0.163*	2.167	0.355***	3.667	0.119	1.073	
NT→PI	0.304***	4.256	0.331***	3.235	0.507***	5.973	
R-square	0.764***		0.700***		0.516***		
F	2	20.779	14.225		7.651		

PS: *** represents P < 0.05, ** represents P < 0.01, * represents P < 0.05

4.3 Moderation effect test results

To verify the moderating effect of PRI and PDI on the mediating model, the MPLUS software was used to centralize the variables, and the mediating effect coefficients and significance of PFV, PEV and NT were calculated at high and low levels (± 1 standard deviation). The results are presented in Table 4. In the authentic product story model and humorous product story model, results indicate that PRI and PDI has a significant moderating effect on the mediating effects of PFV, PEV and NT. In the concise product story model, results indicate that PRI and PDI has a significant moderating effect on the mediating role of PFV and NT.

Product	Moderating	Mediation	Mediation	Mediation	R-square	F	
Story Type	Variables	Role of PFV	Role of PEV	Role of NT	1		
	HPRI	0.213***	0.100*	0.152**	0.766***	21.096	
Authentic	LPRI	0.262***	0.116*	0.187***	0.700		
story	HPDI	0.244**	0.116*	0.152**	0.766***	21.003	
	LPDI	0.235**	0.105*	0.209**	0.766		
Humorous	HPRI	0.243**	0.234***	0.252**	0.704***	14.631	
	LPRI	0.206*	0.228***	0.237**	0.704		
story	HPDI	0.273**	0.246***	0.243**	0.701***	14 221	
	LPDI	0.200*	0.251***	0.252**	0.701***	14.331	
	HPRI	0.089	0.023	0.105	0.529***	8.034	
Concise story	LPRI	0.108*	0.019	0.093*	0.329	8.034	
	HPDI	0.064	0.02	0.11	0.539***	8.254	
	LPDI	0.105*	0.025	0.134**	0.559	0.234	

Table 4. Moderation Effect Test Result

PS: HPRI(LPRI) means high(low) product involvement. HPDI(LPDI) means high(low) purchase decision involvement. *** represents P < 0.05, ** represents P < 0.01, * represents P < 0.05. The high and low levels of the moderating variables refer to the corresponding results of \pm one standard deviation after the variable is centralized.

5. Summary

5.1 Conclusion

This study examined the impact of different types of product stories on consumers' purchase intention in the context of experiential consumption, and investigated the mediating role of perceived functional value, perceived emotional value, and narrative transportation, as well as the moderating role of product involvement and purchase decision involvement. The findings are as follows:

Authentic and humorous product stories can influence consumers' purchase intention by affecting their perceived functional value, perceived emotional value, and narrative transportation. Product involvement and purchase decision involvement also play a moderating role in this process. Regarding authentic product stories, consumers with low product involvement are more likely to perceive the functional value and emotional value of products, and to be influenced by the narrative transportation. Consumers with high purchase decision involvement are more likely to perceive the functional value and emotional value of products, while those with low purchase decision involvement are more susceptible to the narrative transportation. As for humorous product stories, consumers with high product involvement are more likely to perceive the functional value and emotional value of products, and to be influenced by the narrative transportation. Consumers with high purchase decision involvement are more likely to perceive the functional value of products, while those with low purchase decision involvement are more likely to perceive the emotional value of products and be influenced by the narrative transportation.

5.2 Management Implications

Firstly, When crafting a product story, it is crucial to prioritize authenticity in order to establish a sense of trust among consumers. Moreover, incorporating humor into product stories can enhance consumers' identification with the product. Finally, crafting effective product stories requires a deep understanding of consumers' characteristics to create value.

5.3 Limitations and future research

This study has some limitations. First, this study used skincare products as the product in the story, and the sample mainly consisted of young women, which may limit the generalizability of the findings. Future research could expand to other product categories or investigate different populations. Second, the research model in this study only considered the mediating role of value perception and narrative transportation and the moderating role of involvement. Future research could include other psychological factors to improve the explanatory power of the model.

Reference

- [1] Yang Shanshan. Lost in stories: factors affecting narrative transmission. Zhejiang University, 2014.
- [2] Li Aimei, Chen Chunxia, Sun Hailong, et al. A review of research on story marketing for enhancing consumer experience. Foreign Economics and Management, 2017,39(12):127-139.
- [3] Papadatos C. The art of storytelling: How loyalty marketers can build emotional connections to their brands. Journal of Consumer Marketing, 2006, 23(7): 382–384.
- [4] VAN, LAER, TOM. The Extended Transportation-Imagery Model: A Meta-Analysis of the Antecedents and Consequences of Consumers' Narrative Transportation. Journal of Consumer Research, 2014,40(5):797-817.
- [5] Chiu, H. C., Hsieh, Y. C., Kuo, Y. C. How to align your brand stories with your products. Journal of Retailing, 2012,88(2), 262-275.
- [6] Mitroff I I, Kilmann R H. Stories managers tell: A new tool for organizational problem solving. Management Review, 1975, 64(7):18-28.
- [7] West, Patricia M., Joel Huber, Kyeong Sam Min. Altering Experienced Utility: The Impact of Story Writing and Self Referencing on Preferences. Journal of Consumer Research, 2004,31 (3),623–30.
- [8] Sweeney J C, Soutar G N. Consumer perceived value: The development of a multiple item scale. Journal of Retailing,2001, 77(2):203-220.
- [9] Wang Rong, Li Hui. The Influence Mechanism of Consumer National Consciousness on the Purchase Intention of Foreign Brands: On the Moderating Effect of Consumer-Brand Emotions. Economic and Management Research, 2013(03):102-110.
- [10] Tang Shan. The Study on the Influence of Brand Story on Consumer Purchase Intention. Beijing Jiaotong University, 2019.
- [11] Zaichkowsky, Lynne J. Measuring the Involvement Construct. Journal of Consumer Research, 1985,12(3):341-352.
- [12] Huang Liyao. The Study on the Influence of Tourism Consumer Involvement on the Purchase Intention of Cultural and Creative Products. Northeast Normal University, 2020.
- [13] Yang Wene. The Influence of Product Involvement and Perceived Value on Festival Tourists' Experience Quality. South China University of Technology, 2016.
- [14] Liu Qina. The Influence of Online Storytelling Ads Based on Experiential Marketing Theory on Purchase Intention. Beijing University of Posts and Telecommunications, 2015.
- [15] Liang Yongqi. The Study on the Influence of UGC Characteristics of Cross-border E-commerce Communities on Consumer Purchase Intention. Donghua University, 2021.
- [16] Cui Zhanfeng, Chen Yitao. An Empirical Study on the Characteristics of Offline Experience on Consumers' Perceived Value and Revisit Intention. Enterprise Economy, 2020(02):84-91.

[17] Oh, Lim, Hwang. How Interactive Storytelling Persuades: The Mediating Role of Website Contingency and Narrative Transportation. Journal of Broadcasting & Electronic Media, 2020, 64(2):1-22.