

The Research of Motivation for Word-of-Mouth: Based on the Self-Determination Theory

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Key words

Word-of-Mouth, Relationship Strength, Self-Determination Theory, Motivation

Abstract

To understand the generation of WOM motivation, this research studies the relationship between three innate psychological needs (e.g. autonomy, competence, and relatedness) and word-of-mouth motivation based on Self-Determination Theory. How the expertise of the sender, the relationship strength between the sender and the receiver affect the motivation of word-of-mouth through these three psychological needs is also studied. A questionnaire based survey was employed to collect data.

The results indicate that three psychological needs affect the motivation of word-of-mouth. Moreover, the expertise of the sender affects the motivation of word-of-mouth through competence need, and the relationship strength between the sender and the receiver affects word-of-mouth motivation through relatedness need. This study will help companies to get deeper understanding of WOM motivation, and suggestions is given to improve satisfaction of consumer basic psychological needs in marketing activities.

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1. Introduction

Word-of-mouth (WOM) refers to interpersonal communication of products, service or companies between individuals. As such communication is non-commercial, consumers tend to rely more on WOM to make a purchase decision. For companies, WOM is a double-edged sword. Positive WOM may turn an infamous company to a world-renowned overnight, while negative WOM may easily ruin a prestigious brand. There is a need to understand how WOM functions for companies to enhance communication efficiency and establish competitive advantages.

Some scholars have already discussed WOM motivation so far. However, previous studies mainly focused on the structure of WOM motivation and the effect of different motives on consumer intention and behavior, rather than the factors triggering the motivation. Self-Determination Theory explains the motivation of human behaviors from three innate psychological needs: autonomy, competence and relatedness. According to Self-Determination Theory, the factors under social context which satisfy those needs should be considered when explaining certain behaviors. Accordingly, we will discuss whether and how the social context satisfies psychological needs when we explain WOM behaviors. Based on Self-Determination Theory, the present research explains WOM motivation from a psychological perspective. It also studies how the personal characteristics of the communicators trigger WOM motivation through

three basic needs. The paper ends with a discussion of the implications from our findings for marketing managers and researchers and suggest directions for future research.

2. Literature Review

2.1 Previous Research on WOM motivation

Word of mouth is the informal ways to convey ideas, comments, opinions or information between individuals who are not salesman (Engel et al., 1969). Dichter (1966) interviewed consumers on their motivation to communicate positive WOM. He identified the motivation into four categories. First, product involvement, such as easing the tension or excitement from the use of products. Second, self-enhancement, such as gaining attention, showing connoisseurship and seeking confirmation. Third, message involvement, such as sharing unique and attractive advertisement or promotion messages. Fourth, other involvement, such as helping others(Dichter,1966). Price, Feick and Guskey (1955) reported that people spread WOM out of altruism and helping others. Therefore, people tend to provide market information, recommend products, and explain the pros and cons among brands to other consumers. Sundaram, Mitra and Webster (1998) found that consumers engaged in positive WOM because of altruism, self-enhancement and seeking opinions, while altruism, vengeance, and reduction of anger, anxiety and sadness may cause negative WOM. The similarities and differences of WOM motivation between U.S. and Chinese consumers was explored by Mee-Shew et al. (2007). Consumers in both countries share similar motivational factors, such as altruism, sense of achievement, and strength of social ties. Additionally, Chinese consumers engage in positive WOM because of seeking advice and confirmation of own judgement. In terms of negative WOM, similar motives include strength of social ties, altruism and seeking therapeutic effect. However, seeking correction or compensation and seeking bargaining power are found only among U.S. consumers, while seeking confirmation of one's own judgment, seeking advice, and seeking retaliation are found only among Chinese consumers. Hennig-Thurau et al. (2004) also revealed eight motives of electronic WOM, including concerns for other consumers, venting negative feelings, extraversion/positive self-enhancement, social benefits, economic incentives, helping the company, advice seeking and platform assistance.

While prior research has studied different types of motives of WOM and their effect on intention and behaviors, less is known about the factors triggering the motives of WOM. This research will to discuss these factors based on Self-Determination theory.

2.2 Self-Determination Theory

According to Self-Determination Theory, humans were assumed to be active and growth-oriented organisms that naturally tend to pursue psychological development, continuously strive for challenges, and integrate external experiences and sense of self(Deci & Ryan, 2000). These natural propensities require continuous support from the social environment to function effectively. Deci & Ryan (2000) proposed that sustaining psychological development and effective functioning depended on satisfaction of basic psychological needs for autonomy, competency and relatedness. They argued that these needs were inherent and ubiquitous, and had little difference across different gender, groups or cultures.

The autonomy need is the desire to self-organize experience and behavior and to have activity consistent with integrated sense of oneself. When an individual perceives autonomy (for example, expressing opinions and taking actions),or he can decide on his own in a high degree, he feels that he can control his own behaviors, and becomes the owner of himself. Therefore, he has high internal motivation to participate in activities. The relatedness need refers to the desire to establish emotional bonds and affiliation with someone or a group— to be loved, understood

and appreciated, also to experience a sense of belongingness. It reflects the need of being connected emotionally with someone who is important. The competence need is described as the trust that an individual believes his behaviors can reach a certain level in order to complete an activity and to control the environment. For example, a valid and right challenge will fully arouse one's enthusiasm. In summary, the social context satisfying these needs can facilitate the internalization of external motivation, and persist in an activity and positive mental conditions, thus lead to better development and more positive results. The social context that thwarts satisfaction of these needs, by contrast, results in lower motivation, work performance and happiness (Liu & Zhang, 2010).

According to Self-Determination Theory, an individual's motivation and behaviors should be examined by whether the environment satisfies the needs for autonomy, competence and relatedness. The present study focuses on the influence of three psychological needs on WOM motivation, and how this effect is driven by WOM transmitter personal factors.

2.3 Personal Factors of the Transmitter

2.3.1 Relationship Strength

Bristor (1990) indicated that the WOM communication network is the social network consisting of WOM communicators and their relationships between each other. The relationship strength, which is the extent of the association between people, is considered as the power to connect one and another in this social network. People in weak ties may be stranger or merely know each other. Contradictory, in strong ties, people have very close relationships, such as neighbors or friends. Prior research has mainly examined the effect of the relationship strength on WOM from the perspective of WOM receivers. For example, Smith (2002) showed that the effect of WOM on purchasing decision is influenced by the relationship strength, no matter the purpose is hedonic or pragmatic. Wirtz and Chew (2002), on the other hand, indicated that compared with consumers in weak ties, consumers in strong ties are more likely to engage in WOM. In this research, we propose that relationship strength increases satisfaction of three psychological needs, thus influences the motivation for and intention of WOM.

2.3.2 Expertise of WOM Transmitters

Expertise of WOM transmitters refers to the professional abilities and rich consumption experiences of a particular product that the transmitter possesses. Researchers have found that expertise of WOM transmitters affects consumer purchasing decisions through WOM (Bansal & Voyer, 2000). Transmitters with professional knowledge are often experts or quasi-experts in a certain field. Their expertise allows them to easily get in touch with new products and acquire relative knowledge, earning high degrees of prestige through WOM (Mitchell & Dacin, 1996).

Nevertheless, previous researches seldom discuss how expertise of WOM transmitter affects the motivation and behaviors of WOM. Childers et al. (2001) suggested that key opinion leaders had more powerful influence on consumer behavior. As key opinion leaders, one of their pivotal characteristics is their rich knowledge and professional competence in a certain field. They are highly creative and bear greater risks. We assume that expertise of WOM transmitter may increase satisfaction of psychological needs, which influence WOM motivation.

3. Research Model and Hypotheses

According to the literature review above, we propose the research framework shown in Figure 1. Expertise of WOM transmitter, together with relationship strength of WOM transmitter and receiver, will facilitate consumer perceived satisfaction of three psychological needs during the process of WOM, which in turn affect WOM motivation.

3.1 Expertise of WOM Transmitter and Satisfaction of Competence Need

As mentioned above, expertise of WOM transmitter refers to the professional abilities and rich consumption experiences of a particular product that the transmitter possesses. In Self-Determination Theory, competence need is defined as the trust that an individual believes his behaviors can reach a certain level in order to complete an activity and to control the

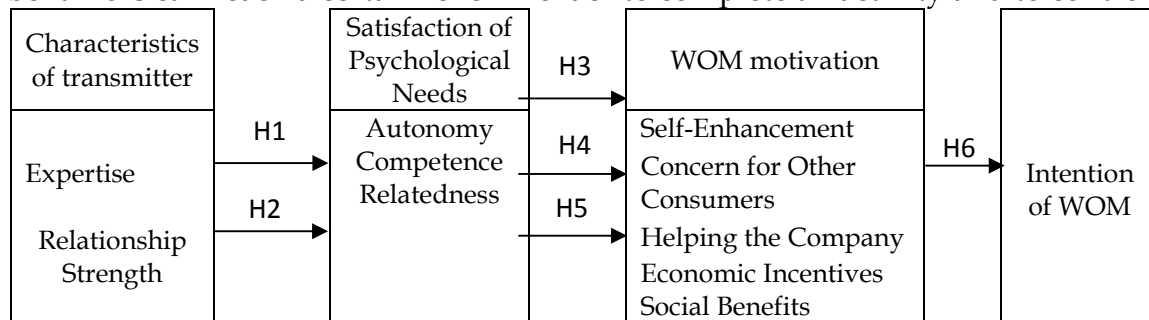


Figure 1 Research Framework

environment. However, this trust could be supported or thwarted by the environment. Researches on consumer behaviors indicates that key opinion leaders play a critical role in interpersonal communication. Firstly, mass communication media influence key opinion leaders, then key opinion leaders spread the information to their followers through interpersonal network. Key opinion leaders are keen on shopping and browsing product information, and thus very concerned about retail price, promotional activities and service quality of retail stores. In this regard, they have extensive product knowledge and rich purchasing experiences, proactively share product information with others, and endeavor to help others (Fieck & Price, 1987). People with high degree of expertise and competence will proactively engage in WOM communication in order to satisfy their competence need, as they believe they are capable of communicating correct product and brand information out of confidence.

H1: Expertise of WOM transmitter positively affects satisfaction of competence need.

3.2 Relationship Strength and Satisfaction of Relatedness Need

According to Self-Determination Theory, relatedness need refers to the perceived understanding and respect between people. They perceive a sense of belongingness or affinity in groups or with others, and such relatedness in turn provides a supportive social context. Interpersonal relationship that satisfies relatedness need will make the individual realize that his own interest is cared about and that he is being liked.

Relationship strength is perceived closeness of the relationship between the WOM transmitter and receiver. Bristor (1990) suggests that WOM communication network is a social network which enhances interpersonal relationship through WOM. When relationship strength is strong and people are closely connected, they would like to express their feelings and opinions without reservation. They feel that they are trusted and understood each other, and a sense of belongingness will be developed. That is why WOM between acquaintances is more frequent (Anderson, 1998; Frenzen & Nakamoto, 1993). We assume that relationship strength increases satisfaction of relatedness need.

H2: Relationship strength positively affects satisfaction of relatedness need.

3.3 Satisfaction of Psychological Needs and WOM motivation

Self-Determination Theory demonstrates that every single person has the need for autonomy, relatedness and competence. Once these needs are satisfied, individuals will be driven to work by internal motivation, stretching potential and producing positive outcomes.

According to Self-Determination Theory, instead of individual difference of the density of those psychological needs, satisfaction of these needs which affects motivation is underlined. We hereby propose the following hypotheses:

H3: Satisfaction of autonomy need positively affects motives of WOM.

H3a: Satisfaction of autonomy need positively affects motive of self-enhancement.

H3b: Satisfaction of autonomy need positively affects motive of concerns for other consumers.

H3c: Satisfaction of autonomy need positively affects motive of helping the company.

H3d: Satisfaction of autonomy need positively affects motive of economic incentives.

H3e: Satisfaction of autonomy need positively affects motive of social benefits.

H4: Satisfaction of competence need positively affects motives of WOM.

H4a: Satisfaction of competence need positively affects motive of self-enhancement.

H4b: Satisfaction of competence need positively affects motive of concerns for other consumers.

H4c: Satisfaction of competence need positively affects motive of helping the company.

H4d: Satisfaction of competence need positively affects motive of economic incentives.

H4e: Satisfaction of competence need positively affects motive of social benefits.

H5: Satisfaction of relatedness need positively affects motives of WOM.

H5a: Satisfaction of relatedness need positively affects motive of self-enhancement.

H5b: Satisfaction of relatedness need positively affects motive of concerns for other consumers.

H5c: Satisfaction of relatedness need positively affects motive of helping the company.

H5d: Satisfaction of relatedness need positively affects motive of economic incentives.

H5e: Satisfaction of relatedness need positively affects motive of social benefits.

3.4 WOM motivation and Intention of WOM

Several motives for WOM have been found so far (Sundaram & Webster, 1998; Hennig-Thurau et al., 2004). Self-enhancement, concern for other consumers, helping the company, economic incentives and social benefits are widely acknowledged as motives of WOM. The research of Hennig-Thurau et al. (2004) indicates that the stronger these motives, the more possibly WOM occurs.

H6: Motivation of WOM communicators positively affects intention of WOM.

H6a: Self-enhancement positively affects intention of WOM.

H6b: Concern for other consumers positively affects intention of WOM.

H6c: Helping the company positively affects intention of WOM.

H6d: Economic incentives positively affect intention of WOM.

H6e: Social benefits positively affect intention of WOM.

4. Research Design

After reviewing relevant literature on WOM and Self-Determination Theory, we summarize five motives of WOM, including concern for other consumers, self-enhancement, social benefits, economic incentives, and helping the company. The scale developed by Netemeyer et al. (1992) is used to evaluate expertise of WOM transmitter. The transmitter's knowledge and abilities of the product are mainly investigated from five aspects: insightful, capable, knowledgeable, and trained and experienced (Netemeyer et al., 1992). We adopt the scale proposed by Frenzen and Nakamoto (1993) to evaluate the relationship strength, including closeness, familiarity, support and connection. The scale examining satisfaction of psychological needs is adapted from the innate psychological needs scale of Deci and Ryan (2000). The five motives of WOM is measured according to Hennig-Thurau et al. (2004), including self-enhancement, concern for other consumers, helping the company, economic incentives and

social benefits. And the scale of WOM comes from Brown (2005). All the measures in this study are in standard seven-point Likert scale format.

We tested the survey after referencing from other scholars, and finalized the questionnaire according to test results. The questionnaire was distributed via online and offline channels to reach target population. The survey was posted through social media such as Weibo, Wechat, and QQ, and successfully collected 382, with 332 valid. In addition, the “mall intercept” method was undertaken at the train station and a popular mall. 100 paper questionnaires was distributed and collected, with 92 valid. In total, 424 questionnaires are valid. The collected and valid questionnaires comprise of 37.6% and 87.9% of total distributed questionnaires respectively. T-test was conducted between the online and offline samples. There is no significant difference on the age, sex, education degree between the two samples.

Among 424 valid samples, male respondents consist of 53.5% while female 46.5%. In terms of age distribution, 82.5% of the samples fall on the range between 20 and 30 years old. Also, 89.6% of the respondents receive bachelor or higher degrees, and thus they are more concerned about the overall consumption experience.

5. Data Analysis

5.1 Reliability Analysis

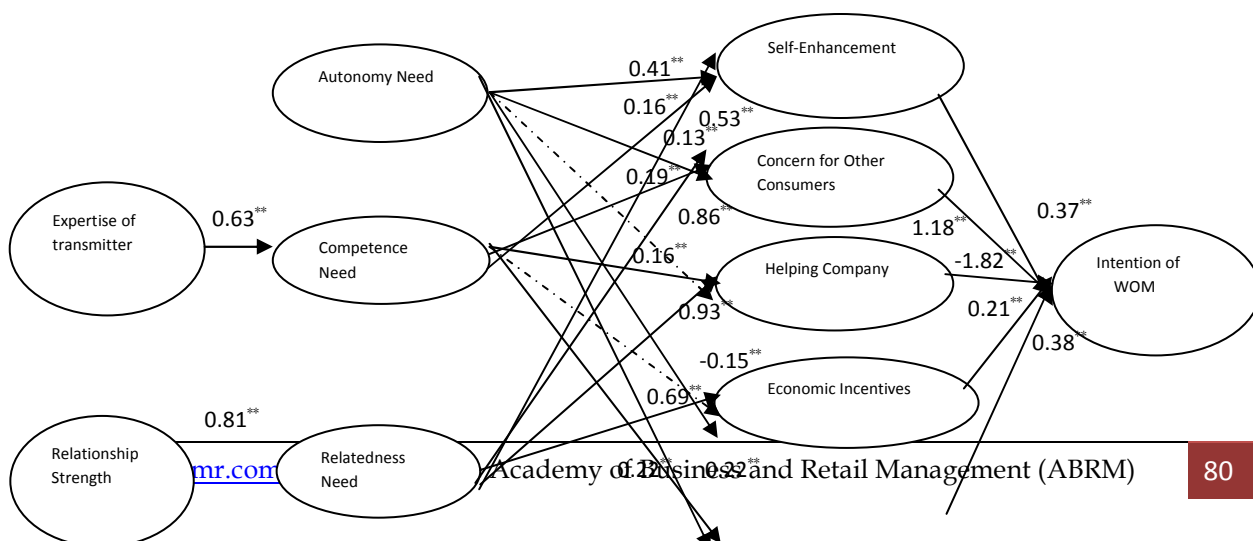
According to reliability analysis of all 11 variables, apart from self-enhancement (0.690), relationship strength (0.785) and social benefits (0.798), reliability coefficients (Cronbach's α) of other variables are above the 0.8 level. The result indicates that all measures are reliable.

5.2 Validity Analysis

The research model was subjected to a confirmatory factor analysis by using maximum likelihood estimate program in LISREL 8.52. The fit statistics of the confirmatory factor analysis indicate that the measurement model fits the samples well ($\chi^2/df=2.15$ ($P=0.00$), $CFI=0.92$, $NFI=0.91$, $NNFI=0.91$, $RMSEA=0.076$). Meanwhile, all factor loadings are highly significant, and none of the shared variances (Φ^2) between pairs of constructs is larger than the average variance extracted (AVE) by each construct, showing that the measures exhibit convergent and discriminant validity.

5.3 Tests of the Research Model and Hypotheses

Using sample statistics, we conduct structural equation modeling. The results indicate that this model performs well in terms of goodness-of-fit ($\chi^2/df=2.01$ ($P=0.00$), $NFI=0.900$, $NNFI=0.915$, $CFI=0.921$, $RMSEA=0.076$). Figure 2 and Table 1 below demonstrates the path coefficients of different variables in the research model and summarizes the results of the tests of hypotheses respectively.



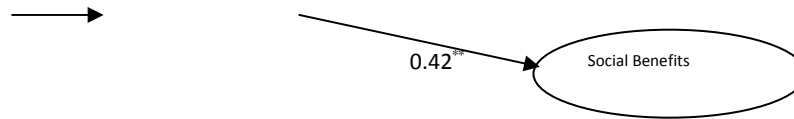


Figure 2 The Path Coefficient of the Model

Table 1 Summary of Tests of Hypotheses

Hypothesis	Content	Supported or Not
H1	Expertise of WOM transmitter positively affects satisfaction of competence need.	Yes
H2	Relationship strength positively affects satisfaction of relatedness need.	Yes
H3	Satisfaction of autonomy need positively affects motives of WOM.	Partially Support
H3a	Satisfaction of autonomy need positively affects motive of self-enhancement.	Yes
H3b	Satisfaction of autonomy need positively affects motive of concerns for other consumers.	Yes
H3c	Satisfaction of autonomy need positively affects motive of helping the company.	No
H3d	Satisfaction of autonomy need positively affects motive of economic incentives.	No
H3e	Satisfaction of autonomy need positively affects motive of social benefits.	Yes
H4	Satisfaction of competence need positively affects motives of WOM.	Partially Support
H4a	Satisfaction of competence need positively affects motive of self-enhancement.	Yes
H4b	Satisfaction of competence need positively affects motive of concerns for other consumers.	Yes
H4c	Satisfaction of competence need positively affects motive of helping the company.	Yes
H4d	Satisfaction of competence need positively affects motive of economic incentives.	No
H4e	Satisfaction of competence need positively affects motive of social benefits.	Yes
H5	Satisfaction of relatedness need positively affects motives of WOM.	Yes
H5a	Satisfaction of relatedness need positively affects motive of self-enhancement.	Yes
H5b	Satisfaction of relatedness need positively affects motive of concerns for other consumers.	Yes
H5c	Satisfaction of relatedness need positively affects motive of helping the company.	Yes
H5d	Satisfaction of relatedness need positively affects motive of economic incentives.	Yes
H5e	Satisfaction of relatedness need positively affects motive of social benefits.	Yes
H6	Motivation of WOM positively affects intention of WOM.	Partially

		Support
H6a	Self-enhancement positively affects intention of WOM.	Yes
H6b	Concern for other consumers positively affects intention of WOM.	Yes
H6c	Helping the company positively affects intention of WOM.	No
H6d	Economic incentives positively affect intention of WOM.	Yes
H6e	Social benefits positively affect intention of WOM.	Yes

6. Conclusion

6.1 The Effect of Psychological Needs on WOM motivation

This study reveals that satisfaction of transmitters psychological needs significantly affects WOM motivation, and therefore supports Deci and Ryan's point of view that motivation for behaviors derive from three basic psychological needs (Deci & Ryan, 2000).

While emphasizing satisfaction of autonomy and competence need, Deci and Ryan suggested that relatedness need, which was considered as "needed backdrop", was less important and promoted internal motivation more indirectly. In contrast, Vallerand regarded the related need as an innate psychological need of an individual in social groups (Vallerand, 1997). He argued that relatedness need was less important than the other two needs for activities that only require independent efforts, such as studying. However, when teamwork was involved, satisfaction of relatedness need became significant to the outcome (Vallerand, 1997). In this study, we find that satisfaction of relatedness need is the most significant to all five motives of WOM among three psychological needs, indicating that whether the transmitter engages in WOM depends on his satisfaction of relatedness need, that is, whether he perceives a sense of belongingness. Our research supports Vallerand's standpoint.

The research also suggests that satisfaction of autonomy need insignificantly affects motive of helping the company, and negatively affects motive of economic incentives. Satisfaction of autonomy need is on personal level, which can be controlled by the transmitter himself. Business operation, on the other hand, may hardly be controlled by his own. That may be the reason why satisfying autonomy need cannot effectively motivate the transmitter to help the company. Also, satisfaction of autonomy need refers to the desire to follow one's own will and not be shackled. In this sense, such inner desire contradicts with offering incentives to motivate WOM. Hence, satisfaction of autonomy need has significantly negative impact on economic incentives. Besides, the study reveals that the effect of satisfaction of competence need on economic incentives is insignificant, suggesting that satisfaction of competence need will not trigger motivation to pursue economic incentives.

6.2 The Effect of Personal Factors on WOM motivation

Based on Self-Determination Theory, the study constructs an effect mechanism indicating that personal factors affect WOM motivation through satisfaction of psychological needs. It is certified that Self-Determination Theory can be applied to WOM communication, and can yield meaningful guidance to motivate WOM.

The study also suggests that expertise of WOM transmitter positively affects satisfaction of competence need, and the relationship strength positively affects satisfaction of relatedness need. Thus, the more expertise WOM transmitter has, the more likely the competence need will be satisfied. Meanwhile, if the relationship strength between WOM transmitter and receiver is high, the relatedness need is more likely to be satisfied, which makes WOM motivation more likely to be triggered.

6.3 The Relationship between Motivation and Intention of WOM

The research indicates that self-enhancement, concern for other consumers, helping the company, economic incentives and social benefits will significantly affect WOM intention. Among these motives, the concern for other consumers has the most significant effect, while economic incentives the least. Consequently, it is suggested that to trigger WOM communication, companies should encourage consumers to help each other in addition to offering economic incentives.

The research also reveals that helping the company negatively affects WOM motivation, which is inconsistent with the research by Hennig-Thurau et al. (2004). It is possible that motives of concern for other consumers and helping the company are similar in their construct, multicollinearity may exist, which can be subjected to investigation in future research.

7. Contribution, Limitation and Future Research

The present study extends the application of Self-Determination Theory to management of WOM from information management, sports management, education management, health management and other behavioral management fields. It successfully integrates motivation theories with WOM management theories to examine how external environmental factors affect three psychological needs to trigger WOM motivation.

The research suggests companies to improve satisfaction of consumer basic psychological needs in daily marketing activities in order to arouse WOM motivation. For example, they can educate consumers to expand their knowledge on product or service; they can also promote consumers to communicate with each other and enhance familiarity among them by establishing membership clubs or online discussion boards.

There are some limitations in this study. First, when analyzing external environmental factors, we only take personal factors of transmitters into consideration, but ignore other social factors, such as rewards provided by companies, which may influence WOM motivation through three psychological needs. Second, the samples are collected by recalling the inner thoughts and motivation, their respective answers may impair the subjectivity of the study. Third, the age of most of the samples ranges from 20 to 30 years old, it may also impact the result. In general, it is expected to conduct future researches on social factors that trigger WOM motivation, including rewards provided by companies, consumption experience and consumer involvement.

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