

DO INCENTIVES IN SWOM COMMUNICATION MATTER? A POSITIVE EMOTION PERSPECTIVE

Xiaorong Wang
School of Management, Xiamen University
422 Siming South Road, Xiamen, Fujian, P.R. China
xiaorong.wg@foxmail.com

Lifang Peng
School of Management, Xiamen University
422 Siming South Road, Xiamen, Fujian, P.R. China
lfpeng@xmu.edu.cn

Feng Xu
School of Management, Xi'an Jiaotong University
28 Xianning West Road, Xi'an, Shaanxi, P.R. China
xf_xjtu@foxmail.com

Xin (Robert) Luo*
Anderson School of Management, The University of New Mexico
1924 Las Lomas NE, Albuquerque, NM, USA
xinluo@unm.edu

ABSTRACT

To motivate electronic word-of-mouth (eWOM) on social media (SWOM), companies offer large rewards; however, the existing academic literature on how incentives influence SWOM communication is limited. To further advance this line of research, this study explores the effect of incentives on senders' positive emotions which, in turn, promote the senders' SWOM intention. This study also investigates how unequal types of incentive allocations (i.e., positive and negative inequity) moderate the effect of incentives on senders' positive emotions and examined the moderating effects of emotion regulation (i.e., reappraisal and suppression) on the relationship between senders' positive emotions and SWOM intention. We designed an online scenario survey and collected 650 valid responses from WeChat users in China. The empirical results show that (1) perceived incentives positively influence senders' positive emotions which improve the senders' SWOM intention; (2) positive emotions mediate the path from perceived incentives to SWOM intention; (3) negative inequity weakens the relationship between perceived incentive size and positive emotions, while the moderating effect of positive inequity is not statistically significant; and (4) reappraisal emotion regulation strengthens the effect of positive emotions on SWOM intention, whereas the moderating effect of suppression emotion regulation is not statistically significant.

Keywords: Perceived incentives; SWOM intention; Positive emotions; Equity theory; Emotion regulation

1. Introduction

Electronic word-of-mouth (eWOM) is an important factor influencing consumer attitude and behavior in electronic commerce activities [Chevalier & Mayzlin 2006; Godes & Mayzlin 2009]. With the mushrooming increase in social media (such as Facebook, Google+, Pinterest, Twitter, WeChat, Weibo, and WhatsApp), consumers are increasingly using online product information and experiences shared by fellow consumers when making purchase decisions. According to Nielsen's Global Trust in Advertising Survey [Nielsen 2016], 83% of consumers trust online opinions and recommendations from their friends and families. Extant studies show that the eWOM on social media (hereinafter referred to as SWOM) is superseding traditional WOM as a new form of consumer socialization affecting consumer behavior and marketing strategies [Eisingerich et al. 2015; Wang et al. 2012]. Thus, companies offer a variety of rewards (i.e., free products, coupons, and small monetary payments) to galvanize positive SWOM or social

* Corresponding Author

referrals by existing customers through their social networks. For example, Dropbox, a cloud-based file hosting service provider, leverages free storage to promote user recommendations. In addition, Airbnb provides rewards to senders and receivers to encourage existing users to make referrals, while taxi-hailing service companies, such as Uber and DiDi, provide different coupons to encourage passengers to share product links on social media.

Despite the increasing prevalence of incentivized SWOM in practice, there is a paucity of understanding of how to identify the effect of monetary incentives on SWOM communication in the fields of marketing and information systems. Although previous studies have investigated the effects of monetary incentives on traditional WOM [Ryu & Feick 2007; Wirtz & Chew 2002; Wirtz et al. 2013] and eWOM communication [Ahrens et al. 2013; Jin & Huang 2014; Reimer & Benkenstein 2016], the research results are inconsistent. Some studies showed that monetary incentives may be an effective management tool for increasing the likelihood of WOM [Ryu & Feick 2007; Wirtz & Chew 2002] or eWOM behavior [Ahrens et al. 2013], whereas others showed that incentives sometimes do not work [Jin & Huang 2014] or may inhibit traditional WOM [Wirtz et al. 2013] and eWOM intention [Reimer & Benkenstein 2016] because irrational application of monetary incentives may cause companies unnecessary expenses and decrease marketing performance. Given the paradigmatic ambiguity and the importance of the monetary incentives mechanism, we believe that there is a pressing need to more thoroughly understand which factors influence the path from incentives to SWOM intention in different emerging contexts.

Previous researchers showed that customers are not always motivated by incentives that are cognition-based factors. The WOM literature has shown that psychological factors, such as emotions, considerably influence WOM [Berger & Schwartz 2011; Nyer 1997]. In the social media arena, firms reward existing customers to effectively promoting social referrals or positive SWOM communication among consumers. Extant studies have shown that emotions can powerfully, predictably, and pervasively influence information diffusion on social media [Berger & Milkman 2012; Stieglitz & Linh 2013; Turri et al. 2013]. Notwithstanding the evidence established in a plethora of contexts, scientific investigations that predict the occurrence of emotions, along with incentives, and explicate their consequences for SWOM intention, are lacking. In essence, given the conflicting views in previous studies, further understanding of incentives vis-à-vis emotion and how emotion influences WOM intention in a social media situation is very important. To address the research gaps and further extend this line of research, this study strives to shed light on two primary research questions: 1) What is the mediation effect of the positive emotions of senders on the relationship between incentives and the senders' SWOM behavioral intention? 2) How are the relationships between incentives, positive emotions, and senders' SWOM behavioral intention moderated by the allocation type and emotion regulation?

Drawing on existing literature and the theory of emotion, we investigate the effect of incentives as a mechanism on senders' emotional response and subsequent behavioral intention from the perspective of positive emotions. In particular, we explore the intermediary effect of positive emotions on the path from perceived incentive size to SWOM intention. In addition to variations in the size of the incentives, companies often change the allocation types of monetary incentives for senders and receivers, such that the optimal allocation of monetary rewards becomes a challenge for developers and marketers who design incentive mechanisms. In addition, the distribution mode of incentives is erratic within a company because of uncertainty regarding which allocation types of rewards for senders and receivers work the best [Ahrens et al. 2013]. Thus, this study sheds new light on how different types of incentive allocations moderate the relationship between perceived incentive size and positive emotions at equal and unequal incentive magnitudes. Furthermore, in view of the individual differences in emotion regulation, we examine how emotion regulation moderates the effect of positive emotions on SWOM intention.

This study offers several theoretical and practical contributions. First, it enhances our understanding of the relationship between monetary incentives and SWOM intention. The present study enriches the SWOM literature and provides a theoretical foundation for promotional marketing by firms that embark on electronic commerce activities. Second, we unveil the mediating role of positive emotions in the effect of incentives on senders' SWOM intention, such that this study emphasizes the importance of senders' positive emotions in SWOM communication. Third, although previous studies showed that the allocation types of rewards are directly related to WOM or referral willingness, we extend this perspective by investigating the cue of the inequitable reward allocation versus the effect of perceived incentive size on positive emotions. Finally yet importantly, we provide empirical evidence for how emotion regulation moderates the relationship between positive emotions and SWOM intention. In practice, the results offer guidance for motivating consumer engagement through designing effective incentive mechanisms.

The remainder of this article is structured as follows. We first present the literature review and theoretical background and identify research gaps. Next, we construct a research model and hypotheses. Then, we describe the online scenario design and the data collection, and conduct data analyses. Finally, we discuss the theoretical and managerial implications of the findings and present conclusions.

2. Literature Review and Theoretical Background

2.1. Incentives and SWOM Communication

Researchers have used various methods and theoretical approaches to investigate the motivation for generating eWOM communication. Authors suggested that the factors driving eWOM communication contain organic and incentivized motives, whereas organic motives induce consumers to contribute content voluntarily, and incentivized motives promote online feedback or opinions for monetary and non-monetary incentives [Cheung & Lee 2012; Hennig-Thurau et al. 2004; King et al. 2014; Reimer & Benkenstein 2016]. In essence, incentives play an important role in generating and spreading eWOM information [Hennig-Thurau et al. 2004]. Yet although previous studies attempted to identify the direct and indirect effects of incentives on traditional WOM and eWOM behavior, the findings were inconsistent [Ahrens et al. 2013; Jin & Huang 2014; Ryu & Feick 2007; Wirtz & Chew 2002]. In the information systems (IS) literature, studies investigated various organic factors, including altruism, product-related utility, online trust and distrust, online reviewers' characteristics, and self-enhancement [Chang & Fang 2013; Cheung & Lee 2012; Hennig-Thurau et al. 2004; Reimer & Benkenstein 2016]. Other pertinent studies showed that positive reputation and peer recognition as incentivized motives promote online reviews when direct monetary incentives are lacking [Resnick et al. 2000; Shen et al. 2015].

SWOM is a new form of eWOM in the emerging context of social media, and is regarded as consumers' effort to share online feedback or opinions with friends, families, and others through social media. Diverging from traditional WOM and eWOM, SWOM has unique characteristics in terms of social risk, identity disclosure, geographic and spatial freedom, and the connections between senders and receivers [Balaji et al. 2016; Eisingerich et al. 2015]. Previous studies identified psychological cues, content characteristics, product characteristics, and social network determinants as factors that drive SWOM communication. Balaji et al. [2016] explored the determinants of negative SWOM communication through using social network sites (SNSs) in a service failure. The authors identified and gauged the effect of contextual, individual, and social network factors. Lien and Cao [2014] investigated how psychological motives (i.e., entertainment, sociality, and search for useful information) indirectly influence users' positive SWOM through their attitude toward and trust of WeChat. Chun and Lee [2016] empirically examined whether technology-related factors, such as perceived useful and perceived enjoyment, positively influence customers' recommendation intention on an SNS. Taken together, extant studies on SWOM have explored the organic factors of positive and negative SWOM communication. Our holistic revisit of the literature indicated that although in practice marketers have attempted to develop various incentives for motivating customers to engage in positive SWOM communication, IS research has yet to unveil how incentives and emotions impact SWOM communication. In an effort to further advance this line of research, we seek answers to the outstanding issue in the context of incentivized SWOM communication vis-à-vis senders' emotions. In the following section, we discuss theories related to individual emotions.

2.2. Theories of Emotion

Emotion is an important psychological factor that explains the interaction between individual and external situations and can be considered as affective states reacting to a specific goal or cause [Bagozzi et al. 1999a; Lazarus 1991; Weiss & Cropanzano 1996]. Regarded as a psychological phenomenon, individuals' emotional experiences have been applied to explain attitudinal judgment and behavioral decision making [Lerner et al. 2015]. In this study, we focus on customers' positive emotions in reaction to incentives in the social media context. In the psychology literature, positive and negative emotions are two fundamental dimensions of an emotional experience using a valence-based approach. These affective experiences may be distinguished as specific emotions, such as anger, fear, happiness, and pride [Fredrickson 2001; Laros & Steenkamp 2005; Lerner et al. 2015]. Positive emotions are fewer and less differentiated than negative emotions because positive emotions have similar facial patterns, and it is difficult for someone to remember whether he or she felt joy, pleasure, or contentment [Fredrickson 2001].

In light of the evolvement of emotion theory, many studies have explored the antecedents and consequences of emotions in consumer behavior [Laros & Steenkamp 2005; Watson & Spence 2007]. For emotion formation, scholars suggested that individuals have automatic affective reactions to some antecedent events based on cognitive appraisal theories [Lazarus 1991], affective events theory [Weiss & Cropanzano 1996], and broaden-and-build theory [Fredrickson 2001]. A large amount of experimental evidence supports that emotions are elicited by events and situations [Bagozzi et al. 1999a; Nyer 1997; Roseman & Smith 2001; Watson & Spence 2007]. In the last few decades, many studies focused on consumer emotions evoked by advertising, product-related factors, consumer satisfaction, and service failure [Laros & Steenkamp 2005]. These studies made seminal contributions to understanding the antecedents of emotions. However, there is a lack of certainty regarding how monetary incentive as a marketing event affects consumers' positive emotions in social media. Although previous research showed that monetary incentives can enhance participants' mood through an experimental approach [Meloy et al. 2006], emotion is different from mood in most affective studies because emotion tends to be briefer but more high intensity, target specific, and

intentional than mood [Lerner & Keltner 2000; Yin et al. 2014]. Based on the discussion above, this study further unveils the effect of monetary incentives on senders' positive emotional responses in the SWOM context.

Regarding the consequences of emotions, previous studies investigated how emotions influence consumer behavior [Johnson & Stewart 2005; Watson & Spence 2007], particularly focusing on understanding how emotional content affects senders' behavior and receivers' perceived credibility. For example, several studies investigated the relationship between emotions and social transmission [Berger & Milkman 2012; Stieglitz & Linh 2013]. In addition, researchers have shown that emotional (i.e., anxious and angry) review content can affect the perceived effort and helpfulness of online reviewers [Yin et al. 2014]. Despite these previous efforts, little research has explained the effect of individuals' emotion reactions on SWOM intention. Thus, to extend this line of research in the social media context, we focus on senders' positive emotions which may be induced by firms' reward programs. Specifically, given the research void, we believe it is important to examine the mediating role of senders' positive emotions in the relationship between rewards and SWOM intention.

2.3. Equity Theory

As a general theory of social behavior, equity theory predicts how individuals manage their relationships with others [Hatfield et al. 1978; Huseman et al. 1987; Walster et al. 1973]. Walster et al. [1973] suggested when evaluating the benefits received, individuals tend to justify the equity based on what they give and receive during the decision-making process. Individual reactions to perceived equity and inequity have three classes: (a) under-benefit inequity, where a person's outcome/input ratio is less than that of the comparison other; (b) equity, where a person's outcome/input ratio equals that of the comparison other; and (c) over-benefit inequity, where a person's outcome/input ratio is greater than that of the comparison other [Huseman et al. 1987; Sprecher 1986]. Equity theory has been employed to investigate how the fairness of various exchange relationships, such as employee versus employer, influences workplace behaviors [Hatfield et al. 1978; Huseman et al. 1987]. Lively et al. [2010] estimated the effect of equity on daily emotions and domestic labor using two national datasets. In addition, equity theory has been adopted to study intimate relationships, such as between spouses and close friends. Sprecher [1986] examined the relationship between perceived inequity and emotions in intimate relationships and differentiated the role of under-benefit equity and over-benefit inequity in positive and negative emotions. Extending equity theory to rewarded referrals, Ryu and Feick [2007] explained that the allocation type for rewarding only the recommender or receiver may reduce consumers' recommendation intention based on the personal economic benefit and the psychological cost. In the online context, equity theory has been used to explain decision-making activities of e-referral behavior when rewards are presented to senders and receivers [Ahrens et al. 2013].

2.4. Emotion Regulation

Emotion regulation is a considerable individual property in every life. Different emotion regulation strategies may cause different physiological, behavioral, and emotional responses [Gross 2014; Gross & John 2003]. In the process model of emotion regulation, reappraisal and suppression are two important forms of emotion regulation strategies in influencing individual emotional experience and expression [Gross 1998b, 2015; Webb et al. 2012]. Reappraisal implies that individuals reappraise the cognitive judgment of emotion-eliciting stimulus and emotional responses, whereas suppression implies that individuals inhibit their emotional expression and behavioral reactions [Gross 2015; Webb et al. 2012]. At the broadest level, emotion regulation can be classified as antecedent-focused processes that occur before emotional responses and as response-focused processes that occur after emotion responses have been generated [Gross 1998a, 1998b, 2015; Webb et al. 2012].

Emotion regulation has attracted widespread attention in a variety of disciplines other than psychology, such as anthropology, business, economics, education, law, medicine, and sociology [Gross 2014, 2015]. Most studies have empirically examined the direct and indirect roles of reappraisal and suppression strategies in emotion-generating processes and the behavioral aspect of the emotional response [Berman 2016; Gross 1998b, 2002, 2014; Webb et al. 2012]. In the SWOM context, Balaji et al. [2016] focused on the direct effect of emotion regulation and found that reappraisal regulation negatively affects senders' negative SWOM willingness, but the effect of suppression regulation is not statistically significant. Recent studies focused on the moderating role of emotion regulation in the relationship between emotions and behavioral reactions [Lockwood et al. 2014; Rappaport et al. 2017]. To date, however, research on the moderation effect of emotion regulation on the relationship between emotions and behavioral reactions in SWOM communication is scarce.

3. Research Model and Hypotheses

Based on the literature review and the theoretical background, we propose the research model depicted in Figure 1. The aim of this model is to understand the relationships between perceived incentives, types of incentive allocations, positive emotions, emotion regulation, and SWOM intention. In the following sections, we discuss the key components and the relationships shown in the proposed model.

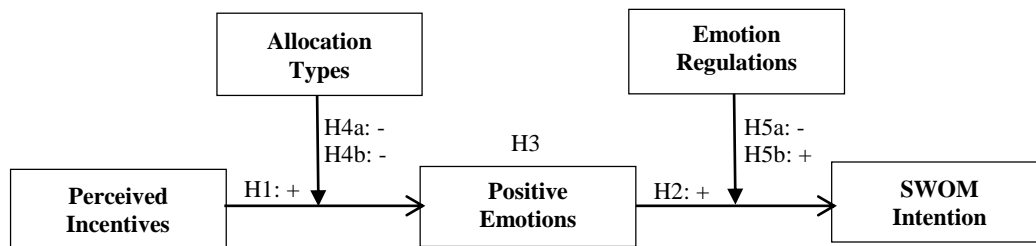


Figure 1: Proposed Research Model

3.1. Perceived Incentives

Incentives can influence the effort exerted for desirable behaviors [Bonner & Sprinkle 2002], as the incentive mechanism is one of the important methods adopted by firms to propel individuals to interact in virtual communities and online reputation systems [Shen et al. 2015; Shwu-Min 2016; Tsai & Bagozzi 2014]. In the WOM literature, researchers have suggested that customers expect to obtain compensation for their time and cost spent on WOM behaviors [Jensen & Yetgin 2017; Wirtz & Chew 2002]. In practice, firms have developed a variety of reward programs to compensate senders and stimulate receivers to promote WOM management. According to the theories of emotion described previously, a specific event can trigger individual emotional responses through cognitive appraisal processes [Fredrickson 2001; Frijda et al. 1989; Lazarus 1991]. This perspective echoes research on consumer behavior, which supports that an event or a situation can evoke positive or negative emotional responses [Watson & Spence 2007]. This study sheds light on monetary incentives vis-à-vis senders and receivers in SWOM communication. In essence, we posit that incentives trigger senders' positive emotional response because senders feel a higher level of positive emotions when they perceive a larger reward is presented by companies. Thus, we proposed the following hypothesis:

H1: *Perceived incentive size positively impacts senders' positive emotions in SWOM communication.*

3.2. Positive Emotions

Positive emotion has been studied in a plethora of disciplines, including psychological science, management, economics, marketing, and information systems [Bagozzi et al. 1999a; Butts et al. 2015; Fredrickson 2001; Lerner et al. 2015; Stieglitz & Linh 2013; Tong & Jia 2017; Tsai & Bagozzi 2014; Ullah et al. 2016; Watson & Spence 2007]. According to the theories of emotion, positive emotion is conceived of as shaping satisfaction and consumer behavior [Phillips & Baumgartner 2002; Watson & Spence 2007] by member participation in online communities [Bagozzi & Dholakia 2006a; Tsai & Bagozzi 2014] and open source software communities [Bagozzi & Dholakia 2006b]. In consumer behavior research, several studies have confirmed that emotions can drive WOM behavior and social transmission. For example, Berger and Schwartz [2011] suggested that emotion is an important psychological driver that motivates WOM communication. In addition, Berger and Milkman [2012] empirically verified that positive content leads to increased online sharing behaviors than negative content. Along this line, Stieglitz and Linh [2013] found that Twitter messages carrying emotional expression are re-tweeted more often and more quickly. Recently, Ullah et al. [2016] stated that positive emotional content with extremely positive ratings is a critical factor for promoting online WOM. Therefore, in the social media context, we surmised that senders' positive emotions are positively associated with SWOM intention:

H2: *Positive emotions positively impact senders' SWOM intention.*

The proposed research model depicts that the connection between perceived incentives and SWOM intention is mediated by senders' positive emotions. This hypothesis implies that existing consumers might experience positive emotions evoked by an incentive event before they engage in SWOM transmission. In the past few decades, researchers empirically examined the mediating effects of positive emotions in various settings. For example, some studies showed that emotional dimensions (i.e., pleasure and arousal) mediate consumer responses to advertising [Holbrook & Batra 1987; Olney et al. 1991]. In light of consumer satisfaction, Oliver [1993] suggested that emotional responses have a mediating role in the relationship between product attributes and consumer satisfaction. In addition, Hwang and Kim [2007] found that enjoyment mediates the effect of perceived web quality versus online trust. Avey et al. [2008] found that positive emotions mediate the connection between employees' psychological capital and their attitudes and behaviors. In the same vein, Butts et al. [2015] pointed out that happiness mediates the effect of specific electronic communication elements on the conflict between work and the workforce outside normal work hours. Departing from these congruent findings, we examined the intermediary effect of positive emotions on the process underlying SWOM communication. Thus, we hypothesized:

H3: *Positive emotions mediate the relationship between the perceived incentive size and SWOM intention.*

3.3. Allocation Type as Moderator

When incentives are provided to senders and receivers, incentive allocation becomes a challenging problem for firms that design and develop customer rewards programs. Following Ahrens et al. [2013], we divide the types of incentive allocations into equity, positive inequity, and negative inequity. Equity implies that the amount of the incentive allocations provided to senders and receivers is equal. Positive inequity signifies that the incentive for senders is more than that for receivers, whereas negative inequity means that senders acquire a lower level of incentive than receivers. The present study was conducted in the context of the transparent incentive mechanism on social media which is more complex than traditional one-to-one referral. On one hand, the two parties are aware of the distribution of the rewards offered by companies. On the other hand, the relationship between senders and receivers is a combination of strong and weak ties in SWOM settings [Balaji et al. 2016; Eisingerich et al. 2015].

As shown in Figure 1, we consider the types (negative and positive inequity) of incentive allocations as moderators in the SWOM context. Regarding negative inequity, senders contribute more time and effort to SWOM or referral behavior, but their rewards are smaller than those for receivers. Therefore, this reward scheme may lead to perceived unfairness by the senders. According to equity theory [Hatfield et al. 1978; Walster et al. 1973], individuals experience distressed feelings when they find themselves participating in inequitable relationships. For positive inequity, the allocation type favoring senders has a negative effect on the WOM likelihood for high psychological or social risk [Jin & Huang 2014; Ryu & Feick 2007; Wirtz et al. 2013]. Further, Sprecher [1986] indicated that inequity is negatively related to personal positive emotions in intimate relationships because under-benefited inequity may cause depression and over-benefited inequity may induce guilt. Thus, we speculated that positive and negative inequities depress the effect of monetary incentives on senders' positive emotion in SWOM communication. Thus, we proposed the following hypotheses:

H4a: *Negative inequity negatively moderates the relationship between the perceived incentive size and positive emotions of SWOM senders.*

H4b: *Positive inequity negatively moderates the relationship between the perceived incentive size and positive emotions of SWOM senders.*

3.4. Emotion Regulation as Moderator

Emotion regulation strategies, such as suppression and reappraisal, have been regarded as considerable difference between individuals because different emotion regulation strategies may cause different physiological, behavioral, and emotional responses in daily life [Gross 2014; Gross & John 2003; Nezlek & Kuppens 2008]. In general, individuals who use a suppression strategy inhibit the expression of an emotion and personal behavior reaction, whereas the use of the reappraisal strategy increases positive emotional expression and decreases negative emotional expression in self-reported measures [Gross 2002; Gross & John 2003]. Because individuals' differences in emotion regulation can be regarded as a personal trait [Gross 2014; Gross & John 2003], researchers have attempted to explore how suppression and reappraisal strategies moderate the association between emotional experiences and subsequent behavior. For example, Lockwood et al. [2014] empirically confirmed that reappraisal strengthens the relationship between affective empathy and prosocial behavior.

Furthermore, extant studies have shown that positive and negative emotional experiences can affect people's behavior, but emotional experiences or behavior also can be altered by different regulation strategies to counter one's own and social demands [Gross 2015; Nezlek & Kuppens 2008]. In the context of incentivized SWOM communication, consumers may have different behaviors through the use of different emotion regulation strategies even if the consumers experience the same emotions evoked by incentives. Therefore, we presume that individuals' differences in emotion regulation moderate the association between senders' emotional responses and SWOM intention. That being said, suppression attenuates the association between positive emotions and SWOM intention, which indicates that the effect of positive emotions on SWOM intention is weakened when the level of senders' suppression is high. In contrast, reappraisal augments the association between positive emotions and SWOM intention, which implies that the effect of positive emotions on SWOM intention is enhanced when the level of reappraisal is high. Thus, we proposed the following hypotheses:

H5a: *Suppression negatively moderates the relationship between positive emotions and SWOM intention.*

H5b: *Reappraisal positively moderates the relationship between positive emotions and SWOM intention.*

3.5. Control Variables

In addition to the core constructs, we postulate that senders' positive emotions and SWOM intention may also be influenced by such variables as gender, age, education, income, and experience using a taxi-hailing app. Scholars have suggested that these factors may influence SWOM communication [Balaji et al. 2016; Eisingerich et al. 2015] and may lead to different patterns of emotions [Bagozzi et al. 1999b]. Therefore, to better understand the effects of

perceived incentive size and types of incentive allocations in the proposed research model, we utilize these factors as a series of control variables affecting senders' positive emotions and SWOM intention.

4. Research Methodology

In this study, we used an online scenario survey to examine the proposed research model. We used a four-factorial design (i.e., no incentives vs. negative inequity incentives vs. equity incentives vs. positive inequity incentives). All respondents were asked to follow a web link to an online survey where they filled out a questionnaire.

4.1. Design of the Scenarios

In each scenario, the respondents were asked to presume that they and their friends would receive incentives from a taxi-hailing company if they shared a product link through their social networking circles and their friends registered for and started to use the company's service (see Appendix A). The scenarios were adapted from existing studies and actual reward programs of taxi-hailing apps in China [Jin & Huang 2014; Wirtz et al. 2013]. With the advent of the Internet, software service platforms for reserving a taxi through mobile devices have emerged to facilitate communication between passengers and taxi drivers [Wirtz & Tang 2016]. In order to attract users, taxi-hailing apps use various incentive mechanisms. For example, Uber rewards senders and receivers with RMB 30 (approximately USD 5) if they invite a new user. In the same vein, DiDi, the counterpart of Uber in China, rewards senders and receivers with RMB 10. In addition, ShenZhou, another professional taxi service provider, offers RMB 30 to senders and RMB 60 to receivers. Based on these different yet realistic reward regulations, we adapted incentive allocations (i.e., RMB 10/50, RMB 30/30, and RMB 50/10) for senders and receivers as three incentive conditions and a baseline condition with no incentives.

4.2. Sample and Data Collection

The respondents were limited to WeChat users. Although the taxi app firms described above provide additional promotional channels, such as micro-blogs and Qzone, WeChat is the most prevalent social network platform with the highest stickiness among all the digital marketing tools in China. According to eMarketing [2016], WeChat has more than 700 million monthly active users, and WeChat news have more influence than news websites and televisions. Therefore, given the site's immense prevalence and representation amid all social network users, we collected data from WeChat users by a professional questionnaire survey site in China, Wjx.com. All respondents were randomly sent a questionnaire link that included one of the four scenarios and were reminded to carefully read the scenario before answering the follow-up questions. Although 728 responses were collected, 650 valid responses were processed for further data analyses. Table 1 displays the demographic profiles of the respondents.

Table 1: Demographics of the Sample (N = 650)

Profiles	Options	Frequency	Percentage
Gender	Male	282	43.4
	Female	368	56.6
Age	< 20	30	4.6
	20–30	395	65.4
	31–40	176	27.1
	> 40	49	7.5
Education	High school	79	12.2
	Undergraduate (College/university)	364	56.0
	Graduate (College/university)	207	31.8
Income	< RMB 2,000	187	28.8
	RMB 2,000–4,000	112	17.2
	RMB 4,001–6,000	142	21.8
	RMB 6,001–8,000	107	16.5
	> RMB 8,000	102	15.7
Experience Using Taxi-hailing App (EUT)	< 6 months	199	30.6
	6–12 months	255	39.2
	> 12 months	196	30.2
Allocation Type	No incentives	162	24.9
	Negative inequity	163	25.1
	Equity	163	25.1
	Positive inequity	162	24.9

4.3. Measures

We adopted all measurement items for the variables in this study from previous studies in psychology, marketing, and information systems (see Table 2). We measured SWOM intention with the use of three items and a seven-point Likert scale (“1” = strongly disagree, “7” = strongly agree) from Wan [2013] and Balaji et al. [2016]. We assessed perceived incentive size with a 10-point scale (“1” = a very small amount, “10” = a very large amount) from Wirtz et al. [2013]. We assessed positive emotions with the use of seven pertinent items and a five-point scale from Bagozzi et al. [1999b]. We adopted the measurement of suppression emotion regulation and reappraisal emotion regulation from Gross and John [2003]. Moreover, we adopted three distribution programs to measure three allocation types where negative inequity is RMB 10/50, equity is RMB 30/30, and positive inequity is RMB 50/10, and then we set a dummy variable for negative/positive inequity using equity as the reference category. The original English-language questionnaire was carefully translated into Chinese. To ensure reliability and minimize language discrepancy, we employed the back-translation process.

Table 2: Constructs and Measurement Items

Construct	Item	Reference
Positive Emotions (EMO)	Emo1: Happy	Bagozzi et al. [1999b]
	Emo2: Joyful	
	Emo3: Pleased	
	Emo4: Enjoyment	
	Emo5: Glad	
	Emo6: Delighted	
	Emo7: Content	
Suppression Emotion Regulation (SER)	Ser1: I control my emotions by not expressing them.	Gross and John [2003]
	Ser2: I keep my emotions to myself.	
	Ser3: When I am feeling positive emotions, I am careful not to express them.	
Reappraisal Emotion Regulation (RER)	Rer1: I control my emotions by changing the way I think about the situation I'm in.	Gross and John [2003]
	Rer2: When I want to feel more positive emotion, I change the way I'm thinking about the situation.	
	Rer3: When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.	
SWOM Intention (SIN)	Sin 1: Very unlikely/Very likely	Adapted from Wan [2013] and Balaji et al. [2016]
	Sin 2: Inclined not to/Inclined to	
	Sin 3: Definitely will not/Definitely will	

5. Data Analysis and Results

5.1. Manipulation Checks

We used a repeated-measure independent t-test to gauge the effectiveness of the incentive manipulation for positive emotions. Results confirmed that incentives successfully induced senders' positive emotions, as respondents in each incentive condition reported higher positive emotions than in the baseline condition (negative inequity: $M = 3.44$ vs. 3.131 , $t(323) = 3.416$, $p < .01$; equity: $M = 3.484$ vs. 3.131 , $t(323) = 4.06$, $p < .001$; positive inequity: $M = 3.362$ vs. 3.131 , $t(323) = 2.4$, $p < .05$). Therefore, the samples of the three incentives conditions ($N = 488$) can be used to process the following data analyses.

5.2. Measurement Model Analyses

To verify the measurement model, we first scrutinized the collected data through principal component analysis (PCA) with a varimax rotation using SPSS 23.0. We analyzed four factors with eigenvalues of more than 1.0 from all items. The total variance that explained all constructs was 78.78%. Then we conducted a confirmatory factor analysis (CFA) using AMOS 23.0 to estimate the convergent validity and the discriminant validity of all latent constructs between positive emotions, suppression emotion regulation, reappraisal emotion regulation, and SWOM intention. According to the guidelines [Hooper et al. 2008; Hu & Bentler 1999], we used several indices to assess the model fit. The cut-off criteria for the goodness-of-fit index (GFI) and the adjusted goodness-of-fit index (AGFI) are greater than 0.90. For the normed fit index (NFI), the comparative fit index (CFI), and the incremental fit index (IFI), values greater than 0.90 are regarded as a good fit. For the root mean square of approximation (RMSEA), a value of less than 0.05 indicates a good fit, and a value in the range from 0.05 to 0.10 is considered a fair fit, while a value above 0.10 shows a poor fit. For the root mean square residual (RMR), a value less than 0.08 is recognized as a good fit. Table 3 lists the fit indices for all measurements in this study. According to the evaluation criteria, the measurement model showed a good fit for this study.

Table 3: Fit Indices

	χ^2	df	NFI	CFI	IFI	GFI	AGFI	RMR	RMSEA
Recommended Value			≥ 0.90	≥ 0.90	≥ 0.90	≥ 0.90	≥ 0.90	≤ 0.08	≤ 0.05
Measurement Model	167.35	98	0.973	0.989	0.989	0.956	0.939	0.032	0.038

We tested the convergent and discriminant validity of the measurement model. We assessed the convergent validity based on three criteria [Fornell & Larcker 1981; Gefen et al. 2000]. First, all loadings of the indicators should be statistically significant and higher than 0.70. Second, the composite reliabilities and Cronbach's alphas should be larger than 0.70. Third, using the same logic with individual indicators, the average variance extracted (AVE) should exceed 0.50. The results in Table 4 show that all loadings except ser3 exceeded the threshold value of 0.70 on the constructs, and all were statistically significant. The convergent reliability and Cronbach's alphas were higher than 0.70, and the AVE values ranged from 0.598 to 0.869. Thus, the adopted measurement model showed adequate convergent validity.

Table 4: Summary of the Results for the Measurement Models

Latent Constructs	Indicators	Loadings	Composite Reliability	Cronbach's Alpha	AVE
EMO	Emo1	0.891	0.952	0.954	0.738
	Emo2	0.900			
	Emo3	0.808			
	Emo4	0.810			
	Emo5	0.909			
	Emo6	0.883			
	Emo7	0.808			
SER	Ser1	0.805	0.816	0.765	0.598
	Ser2	0.825			
	Ser3	0.682			
RER	Rer1	0.773	0.825	0.816	0.611
	Rer2	0.798			
	Rer3	0.773			
SIN	Sin1	0.941	0.952	0.952	0.869
	Sin2	0.932			
	Sin3	0.923			

Note: EMO: positive emotions, SER: suppression, RER: reappraisal, SIN: SWOM intention (hereafter is same).

Consequently, we used two measures to test the discriminant validity. First, the outer loadings of each indicator on associated constructs should be greater than all of its loadings on other constructs. The matrix in Table 5 shows that each indicator loaded much higher on the construct than on any other factors with PCA with a varimax rotation. Second, the square root of the AVE of each construct should be larger than the correlation coefficient between this construct and other constructs [Fornell & Larcker 1981]. The results in Table 6 demonstrate that the measurement model met the rigorous standards. Collectively, across the criteria we examined, the measurements of all constructs in the research model showed adequate convergent and discriminant validity.

In addition, we used two methods to test common method variance. We first performed a Harman one-factor analysis with exploratory factor analysis (EFA) [Harmon 1967; Podsakoff et al. 2003]. In this method, any single latent factor that did not emerge from this analysis or the first factor explained the majority of the variance in all variables. Because of the possible limitations of the Harman one-factor test, we then conducted CFA with a common method factor [Malhotra et al. 2006; Podsakoff et al. 2003]. The test showed that the fit of the one-factor model was considerably worse than that of the measurement model. Therefore, we believe that common method bias was not a large risk in this research. We evaluated the structural model next.

Table 5: Cross-loading Value

	EMO	SIN	RER	SER
Emo1	.819	.328	.096	.128
Emo2	.854	.267	.112	.108
Emo3	.833	.152	.107	.114
Emo4	.848	.141	.063	.085
Emo5	.848	.291	.078	.126
Emo6	.852	.245	.069	.106
Emo7	.809	.224	-.013	.139
Sin1	.364	.885	.012	.079
Sin2	.380	.872	-.006	.066
Sin3	.367	.870	-.007	.085
Ser1	.041	.032	.857	.164
Ser2	.091	.039	.853	.176
Ser3	.107	-.061	.774	.194
Rer1	.152	.051	.298	.767
Rer2	.107	.072	.188	.847
Rer3	.167	.076	.119	.835

Table 6: Correlations of the Latent Constructs and the Square Root of the AVE

	Mean	S.D.	INC	EMO	SER	RER	SIN
INC	6.03	1.805	1				
EMO	3.429	0.814	0.437**	0.859			
SER	4.587	1.043	0.014	0.199**	0.773		
RER	5.081	0.928	0.147**	0.322**	0.442**	0.775	
SIN	4.638	1.392	0.496**	0.623**	0.056	0.212**	0.932

Note: INC: perceived incentives size (hereafter is same); Diagonal elements represent the square root of AVE for that construct; ** $p < 0.01$.

5.3. Testing of Hypotheses

To examine all hypotheses proposed in the research model, we first used the hierarchical regression analysis in SPSS to test the direct effects of incentives on positive emotions and positive emotions versus SWOM intention and the moderating role of the types of incentive allocations and individual emotion regulation. The regression results are shown in Table 7. We then tested the mediating effect of positive emotions between perceived incentives and SWOM intention by adopting the PROCESS macro [Hayes 2013].

For H1 and H2, the perceived incentive size positively impacts senders' positive emotions which, in turn, impact SWOM intention. The results shown in Table 7 indicate that the effect of perceived incentive size on senders' positive emotions is statistically significantly positive (M2, $\beta = 0.41$, $p < 0.001$). In addition, the direct effect of senders' positive emotions on SWOM intention is statistically significant (M6, $\beta = 0.593$, $p < 0.001$). Therefore, hypotheses 1 and 2 are supported.

Table 7: Results of the Hierarchical Regression Analysis

	Positive Emotions (EMO)				SWOM Intention (SIN)				
	M1	M2	M3	M4	M5	M6	M7	M8	M9
Control variables									
Gender	-.046	-.036	-.034	-.032	-.003	.014	.012	.007	.007
Age	.115*	.101*	.095*	.102*	.089	.035	.041	.041	.038
Education	-.074	-.077	-.079	-.079	-.079*	-.032	-.042	-.043	-.040
Income	.048	.043	.047	-.034	.094*	.075	.078	.076	.070
EUT	.164**	.103*	.111*	.120**	.088*	.055	.031	.030	.032
Independent variable									
INC		.410***	.421***	.503***	.475***		.236***	.229***	.244***
Mediator									
EMO						.593***	.474***	.478***	.457***
Moderator									
NIE			-.013	-.023	-.032		-.021	-.018	-.013
PIE			-.120*	-.131**	-.071		-.009	-.006	-.007
SER								-.062	-.053
RER								.035	.050
Interactions									
INC*NIE				-.172**	-.059		.022	.025	.009
INC*PIE				.014	.064		.043	.042	.026
EMO*SER									-.019
EMO*RER									.125**
R ²	.068	.232	.244	.268	.302	.405	.466	.469	.483
ΔR ²	.068	.164	.013	.024	.302	–	.164	.003	.013
F	7.026***	24.17 ***	19.361***	17.503***	20.661***	54.508***	37.830***	32.267***	29.369***
Mean VIF	1.208	1.213	1.288	1.981	1.981	1.252	1.702	1.708	1.343

Notes: NIE: negative inequity, PIE: positive inequity (hereafter is same); Coefficients are standardized; * p<0.05, ** p<0.01, *** P<0.001.

With respect to Hypothesis 3, we adopted PROCESS to estimate the value of the intermediary effect [Hayes 2013]. We selected Model 4 for indirect effects (see Hayes’ model templates for PROCESS for SPSS and SAS). The analysis results are listed in Table 8. For SWOM intention, the 95% confidence interval (CI) of the indirect effect is 0.12 to 0.209, and it is statistically significantly different from zero. The results show that positive emotions mediate the connection between perceived incentive size and SWOM intention. Therefore, Hypothesis 3 is supported.

Table 8: PROCESS Results of the Mediating Effect Analysis

IV	MV	DV	Indirect Effect	Boot SE	Boot LL	Boot UL	Mediating Effect
					95% CI	95% CI	
INC	EMO	SIN	0.16	0.022	0.12	0.209	Significant

Note: IV = independent variable; MV = mediating variable; DV = dependent variable; LL = lower limit; UL = upper limit; CI = confidence interval; the number of bootstrap samples is 10,000.

For H4a and H4b related to the types of incentive allocations, Table 7 shows that the interactive effect of negative inequity and perceived incentive size on positive emotions is statistically significant (M4, $\beta = -0.172$, $p < 0.01$), but there is no interaction effect of positive inequity and perceived incentive size (M4, $\beta = 0.014$, $p > 0.05$). Thus, H4a was supported, but H4b was not supported. Regarding H5a and H5b for emotion regulation, the interaction effect of suppression emotion regulation and positive emotions on SWOM intention was not statistically significant (M9, $\beta = -0.019$, $p > 0.05$), whereas the interaction effect of reappraisal emotion regulation and positive emotions on SWOM intention is statistically significant (M9, $\beta = 0.125$, $p < 0.01$). Therefore, H5a was not supported, but H5b was supported. In addition, to visually display the moderating roles in H4a and H5b, we followed the procedures suggested by Aiken et al. [1991] to plot the interaction effects. For H4a, the shape depicted in Figure 2 shows that the negative inequity of the incentives scheme exerts a greater negative influence on senders’ positive emotions than equity. For H5b, the standardized interaction effect is shown in Figure 3. The crisscross of the two lines indicates that the positive effect of senders’ positive emotions on SWOM intention is amplified accordingly when reappraisal emotion regulation is high and mitigated when reappraisal emotion regulation is low.

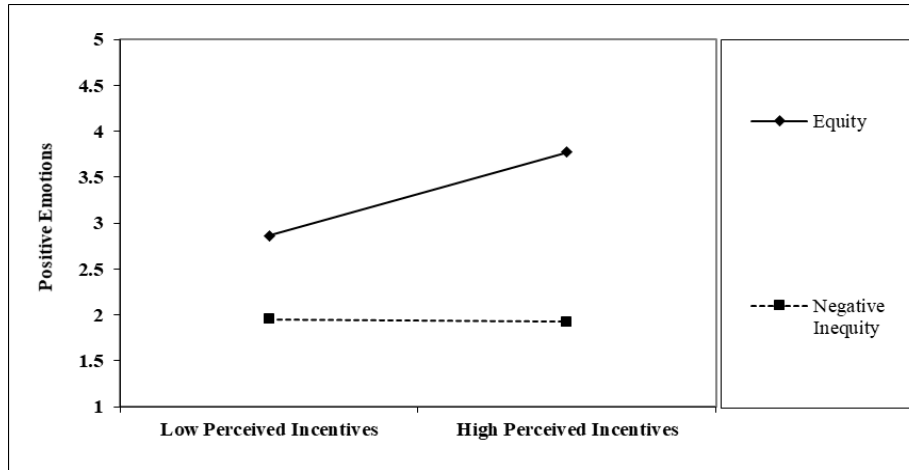


Figure 2: The Interactive Effect of Perceived Incentives and Negative Inequity on Positive Emotions in H4a

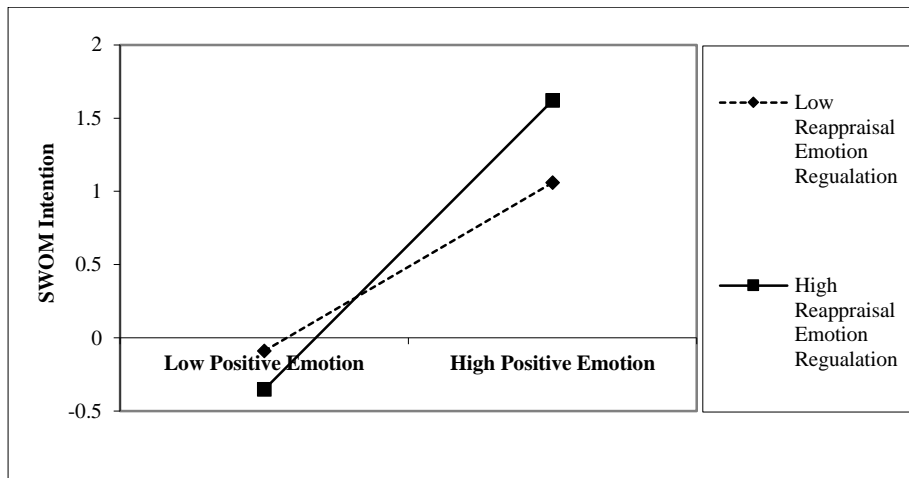


Figure 3: The Interactive Effect of Positive Emotions and Reappraisal (standardized) on SWOM Intention in H5b

Thus far, we have discovered the mediating effect of positive emotions and the moderating role of negative inequity of incentive allocation on the connection from perceived incentive size to positive emotions, and the moderating effect of reappraisal emotional regulation on the relationship between positive emotions and SWOM intention. As theoretical rationales support a moderated mediation model based on the hypotheses above, we utilized Model 21 in PROCESS (see Hayes’ model templates for PROCESS for SPSS and SAS) to analyze the conditional indirect effects. Table 9 shows that the indirect effect of perceived incentive size on SWOM intention through positive emotions was negatively moderated by the negative inequity of incentive allocation (when RER is low, NIE high-low = -0.053; when RER is high, NIE high-low = -0.094), and was positively moderated by reappraisal emotion regulation (when NIE is 1, RER high-low = 0.056; when NIE is 0, RER high-low = 0.097). Thus, the moderated mediation model is supported at the different levels of negative inequity and reappraisal emotion regulation.

Table 9: Conditional Indirect Effect on the Value of the Moderators

Mediator	Indirect Effect (INC → EMO → SIN)					
	NIE	RER	Effect	Boot SE	Boot LL 95% CI	Boot UL 95% CI
EMO	0	4.152	0.129	0.025	0.085	0.186
EMO	0	5.081	0.177	0.026	0.133	0.234
EMO	0	6.009	0.226	0.032	0.171	0.296
EMO	1	4.152	0.076	0.022	0.038	0.124
EMO	1	5.081	0.104	0.026	0.055	0.159
EMO	1	6.009	0.132	0.033	0.071	0.202

Note: LL = lower limit; UL = upper limit; CI = confidence interval; the number of bootstrap samples is 10,000.

6. Discussion and Implications

SWOM campaigns have become an essential part of marketing plans due to the increasing importance of social media. Although in practice firms often motivate consumers to generate positive SWOM or social referrals about their products through promotional incentives, there is a paucity of scientific investigations on the role of incentives in the emotional response of SWOM senders. To further advance this line of research, we drew on theories of emotion and proposed a research model to investigate the effect of incentives on senders' positive emotions and the mediating effect of positive emotions on the path linking incentives to SWOM intention. This study sheds new light on senders' positive emotions which are triggered by incentives and subsequently affect SWOM intention. In addition, this study unveiled that incentive sizes are positively related to SWOM intention and senders' positive emotions mediate this relationship.

This study also contributes to the literature by exploring the moderating roles of the types of incentive allocations and emotion regulation. Although recent studies have shown that the types of reward allocations impact the effects of the rewarded referral [Ahrens et al. 2013; Jin & Huang 2014; Ryu & Feick 2007; Wirtz et al. 2013], the present study diverged from others in empirically revealing that negative inequity weakens the effect of incentives on positive emotions and the moderating effect of positive inequity is not statistically significant. The results in Table 7 show that positive inequity of incentives allocation directly decreases senders' positive emotions ($M3, \beta = -0.12, p < 0.05$). In addition, we modeled emotion regulation through hierarchical regression analysis for these mechanisms. We found that reappraisal emotion regulation strengthens the relationship between positive emotions and SWOM intention. However, the results suggest that suppression emotion regulation fails to weaken this relationship, which is consistent with the conclusion drawn by Balaji et al. [2016]. The lack of significance of suppression regulation may be due to the overwhelming effect on emotions in Chinese social interactions, regardless of a high or low suppresser for emotional expression.

6.1. Theoretical Implications

This study has several important theoretical implications. First, this work enriches the SWOM literature because previous studies largely concentrated on customer satisfaction, product quality, reputation, intrinsic motivation, and altruistic motivation in the eWOM context [Cheung & Thadani 2012; You et al. 2015]. Although some studies have investigated the role of monetary incentives in eWOM transmission, it is still unclear how the effect of monetary incentive is associated with SWOM communication. In the present study, we contribute to the understanding of incentives vis-à-vis customers' SWOM willingness. In addition, whereas previous research focused on a one-to-one mode to investigate the effect of incentives on eWOM or referral likelihood [Ahrens et al. 2013; Jin & Huang 2014; Ryu & Feick 2007, Wirtz & Chew 2002; Wirtz et al. 2013], this study deepens our understanding of broadcasting information promoted by monetary incentives from the perspective of SWOM senders.

Second, we drew on and extended theories of emotion to the context of incentivized SWOM by examining a prevalent phenomenon where monetary rewards provoke senders' positive emotions which, in turn, influence SWOM intention through sharing product links in the senders' social networks. Whereas previous research introduced mood as a mediator in the connection between monetary incentives and task performance [Meloy et al. 2006] and merely investigated how emotions affect information dissemination on social media [Berger & Milkman 2012; Stieglitz & Linh 2013], this study further confirms the positive effect of perceived incentive size on positive emotions which improve senders' SWOM intention. In addition, we provide a deep understanding of incentivized SWOM through modeling monetary rewards and SWOM intention associated with positive emotions. In doing so, we prove the mediating role of positive emotions in the relationship between the perceived incentive size and senders' SWOM intention.

Third, this research strengthens the understanding of how types of incentive allocations influence WOM likelihood on social media. Reward allocations may be a de facto challenge for firms that develop incentive mechanisms. Although previous studies emphasized that differences existed between rewarding senders and receivers and rewarding one party (senders or receivers), the findings for the distribution of bonuses are inconsistent. In essence, rewarding senders and receivers has become a widely acceptable technique on social media. By comparing types of allocation with the equitable type of allocation, we are cognizant that offering a larger incentive to senders or receivers has a negative effect on senders' positive emotions instead of SWOM intention in the setting of social networking platforms.

Fourth, beyond the extant research on incentives, this study contributes to the SWOM literature by gauging the effect of emotion regulation. While extant studies focused on understanding how emotion regulation directly or indirectly affects the generation of emotion and the outcomes of emotional response [Gross 2015; Webb et al. 2012], the moderating role of emotion regulation strategies as individual differences has been largely overlooked. Thus, by applying these constructs to the context of positive SWOM, we identified the moderating effects of emotion regulation

and revealed the important effect of individual emotion regulation for the expression of senders' positive emotions in SWOM communication.

6.2. Practical Implications

This study also has several essential practical implications. First, we provide empirical evidence for the effect of incentives on SWOM communication, thus helping managers to better understand the promotional marketing of firms that wish to embark on social media. The present findings indicate that perceived incentives can increase willingness to share product information in social media. Therefore, firms should carefully take actions to calibrate the reward size and increase senders' perceived incentives. Moreover, we discovered empirically that senders' positive emotions not only affect SWOM intention but also mediate the relationship between monetary incentives and SWOM intention. Thus, firms should analyze consumer sentiment and carry out effective marketing activities for enhancing consumers' positive emotional experiences, such as happiness, joy, pleasure, etc.

Furthermore, previous studies showed that an increase in reward size does not increase WOM likelihood because rewards increase psychological and social costs, and allocation schemes have different functions in different connections between senders and receivers [Jin & Huang 2014; Ryu & Feick 2007]. The present study provides supplementary insights into how to design more effective promotional strategies in SWOM campaigns. In the scenarios, we designed three groups of different reward allocation types, but the total amount of the reward was equal for each group. Compared with equity, negative inequity negatively moderates the relationship between perceived incentive size and positive emotions whereas positive inequity directly reduces senders' positive emotions. Therefore, the present findings provide a suggestive resource to managers that unfair reward allocation is a potential obstruction of SWOM communication. With the increasing prevalence of social media platforms, these findings can aid firms in understanding how to effectively and efficiently leverage social tools to manage customer relationships and brand creation.

7. Limitation and Further Research

This study inevitably has several limitations that may provide potential opportunities for future research. First, we collected data from WeChat users in China. Therefore, scholars could investigate different social networks in different cultural systems to further generalize the research findings and substantiate the effect of monetary incentives in other types of social media. Second, based on the connection between emotion regulation and culture [Butler et al. 2007; Matsumoto et al. 2008], future research should examine how cultural differences influence the effects of incentives on positive emotions and SWOM communication. Third, we examined how incentives impact consumers' positive emotions, but other scholars have suggested that negative emotions and social risks may also play an important role in potential consumers' attitude and behavior. Thus, future studies could explore and compare positive and negative emotions in this research stream, as well as in other contextual settings. Finally, we investigated only the influence of incentives on positive emotions and SWOM intention in a situation where consumers experienced satisfactory service. Thus, future studies should further explore whether incentives could function in other situations.

8. Conclusion

Due to the advent of social media, SWOM strategies are an emerging crucial area in IS research. Despite the increasing attention in extant studies, few empirical investigations have explored the relationship between incentives, senders' emotions, and SWOM communication. Extending the line of SWOM research, we investigated this emerging yet important domain. In essence, we proposed a research model to demonstrate the important role of senders' positive emotions in the relationship between incentives and SWOM intention and to gauge how allocation types and emotion regulation affect the experience and expression of positive emotions. We used data collected from WeChat users to empirically examine and validate the proposed research model. This research may serve as a decisive direction of the paradox faced by firms wishing to offer incentives to promote customer referral or positive SWOM. The results revealed that larger incentives may lead to higher positive emotional experience and subsequent behavioral intention. Moreover, the inequitable types of incentive allocations may decrease senders' positive emotions, as we also discovered that positive emotions can yield a better effect on SWOM expression for high reappraisers. The empirical findings provide a better understanding of how monetary incentives shape positive SWOM communication by shedding light on senders' psychological processes.

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Appendix A

Scenario design of the incentives condition (adapted from [Jin & Huang 2014; Wirtz et al. 2013])

Imagine that you use a tax-hailing app, such as DiDi, Uber, ShenZhou, etc. The app provides excellent customer service, its network coverage is excellent, and it charges competitive prices. Overall, you are satisfied with your experience using the mobile app service, and you have decided that you would definitely use the app again.

In order to expand its customer base, the company is operating a referral reward program. If you share the app's product link with your WeChat circle of friends, you would be offered a coupon worth RMB X1 after any friend registers for and uses the app through the shared link. In addition, your friend would receive a coupon worth RMB X2.

Note: we designed the different value of X1/X2 (10/50 vs. 30/30 vs. 50/10) as the incentives condition.

Scenario design of the baseline condition (adapted from [Jin & Huang 2014; Wirtz et al. 2013])

Imagine that you use a tax-hailing app, such as DiDi, Uber, ShenZhou, etc. The app provides excellent customer service, its network coverage is excellent, and it charges competitive prices. Overall, you are satisfied with your experience using the mobile app's service, and you decided that you would definitely use the app again.

In order to expand its customer base, the company wants you to share the app's product link with your WeChat circle of friends.