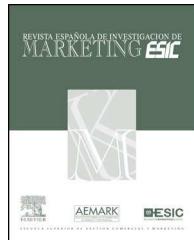


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ARTICLE

Shanghai adolescents' brand interactions on the Chinese Social Networking Site Qzone: A Uses and Gratifications Approach



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Abstract This study analyses the interaction of Chinese adolescents with commercial brands on the popular Chinese social networking site, Qzone, based on a Uses and Gratifications Theory. Structural equation analysis was employed to verify the proposed framework within a sample of 220 adolescent Qzone users resident in Shanghai. From the three gratifications proposed by the theory, only entertainment had a significant positive influence on the likelihood of interacting with brands on the social networking site. Gratifications derived from socializing and information-seeking did not enhance brand interaction of Chinese adolescents in this social network. The results support the view of some researchers who suggest that brand communication strategies directed at the adolescent segment in SNSs should not concentrate on providing information about product and brand characteristics, but on creating contents that help to satisfy the entertainment needs of young people.

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PALABRAS CLAVE

Redes sociales online;
Adolescentes;
Gratificaciones;
Interacción con las marcas;
Qzone

La interacción de los adolescentes residentes en Shanghai con las marcas en la red social china Qzone: una aproximación desde la teoría de los usos y gratificaciones

Resumen Basándose en la teoría de los usos y gratificaciones, el presente estudio analiza la influencia de las gratificaciones emocionales derivadas del uso de la red social Qzone en la interacción con las marcas por parte de los adolescentes chinos en esta plataforma online. Con este propósito, se llevan a cabo encuestas autoadministradas a 220 adolescentes usuarios de la red social Qzone en la ciudad de Shanghai. Los resultados del estudio reflejan que mientras que

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las gratificaciones referentes al entretenimiento ejercen una influencia positiva y significativa en el grado de interacción con las marcas, las gratificaciones vinculadas con la socialización y la búsqueda de información, por el contrario, no incrementan la interacción de los adolescentes chinos con las marcas en Qzone. Estos resultados confirman la opinión de algunos investigadores que sugieren no centrar las estrategias de comunicación de marcas, dirigidas al segmento de adolescentes en redes sociales online, en proveer información acerca de las características del producto, sino en crear contenidos que permitan satisfacer las necesidades de entretenimiento de estos.

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Introduction

As a recent worldwide phenomenon, online social networking sites (SNS) have received particular approval from the college student audience. Most of the studies in the literature on this matter focus on Facebook and other such social networks in the countries of the West, while research into the Chinese social networks and the impact on Chinese adolescents who frequent them is rather scarce. It must be pointed out that government censure in China blocks the entry of outside SNSs into the country, but highly developed local social networks such as RenRen, Weibo, Qzone and others certainly do exist. Although these go unnoticed by the rest of the world, these networks are enjoyed by millions of users in China (Sansone, Moretta, & Bruni, 2012). By far the foremost of these is Qzone, which receives the most hits among Chinese youth aged between 15 and 20, when compared to its competitors. Similarly to other social networks, the foundations of Qzone begin with the basic information supplied when people register, which is then accompanied by pictures, comments, videos, and suchlike posted both by users and their friends. A good number of the services provided by Qzone require payment of a fee, and this also applies to their highly active cell phone application. The Chinese company Tencent launched Qzone in 2005, and at the time of writing its users number approximately 600 million, placing it in second position internationally for its numbers of registered users, while Facebook holds first place (Millward, 2013a, 2013b).

Apart from personal profiles, commercial brands can also be present on Qzone through their websites or by creating events that Qzone users are invited to take part in. In recent years, many brands have created their official pages on this Chinese social network, which seeks an efficient low-cost way of contacting Chinese adolescents through this platform. According to trade publications, the social media today are utilized more often than corporate websites by young consumers wishing to get up on a company, brand, or product (Dei Worldwide, 2008), and SNSs are reported by recent media surveys to have taken the place of e-mail as the most widely used online activity, to a point where they are now the primary source of information (Albanesi, 2010; Fuscaldo, 2011). Consequently, it is very important for brands to have a presence in these SNSs and to interact with the teenage audience (Araujo & Neijens, 2012), which is more open to the influence of marketing, the aim being to win its loyalty so that these young users act as brand advertisers through positive word of mouth (Chu & Choi,

2011). In addition, in the social media, brand communicators find openings that never before existed for targeting online stakeholders in their social communities and gaining more personal inroads for establishing bonds with consumers (Gensler, Völckner, Liu-Thompkins, & Wiertz, 2013; Kelly, Kerr, & Drennan, 2010; Rowley, 2009). The findings of recent studies around consumers' brand-related activities indicate that involvement in brand-related SNS groups and virtual communities shows a positive relation with consumer perceptions of viral campaigns and commercial messages in social media (Chi, 2011; Chu, 2011), along with an increase in brand trust and brand loyalty (Casaló, Flavián, & Guinalíu, 2007; Laroche, Habibi, & Richard, 2013; Laroche, Habibi, Richard, & Sankaranarayanan, 2012).

For brand communication strategies to be effective in social networks, it is essential for companies to have a profound understanding of what motivates target groups to interact with brands when networking online. However, we have hardly found any studies in the literature to date that have looked at how and why individuals interact with brands on SNSs to cultivate effective relationships with today's net-savvy consumers, and there are even fewer instances for the case of social networks apart from Facebook. One of the few researches we located in this connection is the recent work by Tsai and Men (2013), which analyses users' motivations for using SNS brand pages. They found that respondents typically used a Facebook brand page as a platform to search for discount or sales news, to exchange information with other members, and to have fun and seek leisure. The results of their research show that when users visit or follow a company Facebook page, they are primarily driven by utilitarian reasons, rather than by motivations of gaining social support, managing social identities, or voicing their opinions and expectations.

In order to contribute to the theoretical knowledge on the mechanism underlying consumer brand engagement via social media and to cover this gap in the scientific literature, this paper proposes an approach based on Uses and Gratifications (U&G) Theory. The aim of this paper is to investigate the impact of the main gratifications potentially derived from use of the Qzone Social Networking Site, i.e. socializing, information seeking, and entertainment, on the degree to which Chinese adolescents interact with brands on this social network. This framework has not been addressed previously in the literature.

In addition, previous research on online social networks in China has been scarce (Chu & Choi, 2011; Jackson & Wang, 2013; Wang, Jackson, Zhang, & Su, 2012), in

particular, regarding Qzone, in spite of the popularity of this SNS among Chinese adolescents. Since there are important cultural differences between Western and Eastern cultures, it would be helpful not to concentrate on the USA and Facebook this time but to carry out investigations around other online social networks in the Eastern countries to arrive at a better understanding of SNS impact on teenager behavior. Thus, a secondary aim of this research is contributing to the cultural diversity in SNS research.

Literature review

Brand communications and user gratifications on social networking sites

The communication strategies and needs of brands have changed with the introduction of social media environments. Firms attempt to address the adolescent segment, interacting with them through their official brand profiles in a direct personalized way (Kelly et al., 2010; Rowley, 2009). To this end, brands concentrate on providing their potential customers with playful experiences and entertainment, information and active participation, to stimulate interactivity between consumers and the brand. Consumers can immediately dialog with the brand, give their opinion, become acquainted with their new products or campaigns, enjoy different kinds of contents and even advertise products themselves through their personal profiles (Othman-Yousif, 2012).

Despite the efforts being made by the brands, however, some studies indicate that the degree to which adolescents interact with brands through social networks is still quite low (Cooper, 2011; Hadija, Barnes, & Hair, 2012). It is not a matter of them not liking their advertising messages, but simply that these young consumers do not notice them, for the brand messages pass by undetected amongst the rest of the information (Kelly et al., 2010). What happens is that SNS users focus their attention on other things of greater relevance for them: friends' profiles, videos, photos, etc. (Zeng, Huang, & Dou, 2009). Hadija et al. (2012) consider that it is very difficult to reach them unless they are really interested in the brand. Hence the relevance of segmented advertising so that advertising messages effectively hit the target audience (Bhattacharya, Scott, & Arthur, 2006). And this audience, now won over to the brand, sends on the message to friends, acting as a brand advocate (Othman-Yousif, 2012).

The degree of intrusiveness that users sense, stands as another main block to social network advertising: an advertisement can be termed as intrusive if it aggravates customers or causes their attention to wander (Lee, 2002). Where the traditional media (television, radio, print) are concerned, the consumer understands that there exists an implicit social contract with the advertising industry, because there are no-charge or low-price programs linked to advertising activities (Gordon & De Lima-Turner, 1997). Advertising is not understood by Internet customers to reflect a contract, however, but rather is seen to be an unpleasant distraction (Gaffney, 2001; Mathews, 2000).

To address these problems and make brand advertising strategies in online social networks effective, it is necessary

to understand not only why people use SNSs, but also how they respond to advertising activities (Rodgers & Thorson, 2000; Zeng et al., 2009). Some authors (Stafford, 2008; Stafford & Schkade, 2004) have found as main motivators for SNS use, factors related with structure, content (information, entertainment), and socialization (mixing with others). The U&G theory (Katz and Foukles, 1962) proposes that media users are engaged in an active quest for avenues that will satisfy needs and provide gratifications that range from the hedonic to the utilitarian; so they might watch television for the buzz of a thriller, or seek the more sober educational approach of a documentary. Therefore, this theory examines the value of media content and advertisement through its power to meet customers' requirements in terms of information, entertainment, escape, fun, or emotional release (McQuail, 2005; Sansone et al., 2012).

Concerning the most suitable contents for brand communication strategies in SNSs, for some authors the advertisement becomes relevant just for its informative content, i.e. a content that informs users about the benefits of the product (Rotzoll, Haefner, & Sondage, 1990). Other authors, however, are of the opinion that such an approach would not constitute the most appropriate advertising discourse for brands in their communication strategies in SNSs (Goldsmith & Lafferty, 2002; Williams, 2010). For these researchers, when brands address the teenage audience, it is no longer sufficient to concentrate on supplying information about product benefits, as used to occur on television; they argue that entertaining contents should also be created to provide some kind of enjoyment or entertainment for the user (e.g. advergames), alongside tools such as forums or chats that allow adolescents to interact and engage in dialog regarding the brand with friends or other users and thereby satisfy their emotional needs for socialization.

The influence of gratifications derived from SNS use on adolescent's brand interaction

Some studies have pointed to the relevance of U&G theory in the specific framework of the online environment, because of its effectiveness in prognosticating how individuals behave in SNSs (Lee & Ma, 2012). Substantial agreement exists among authors that some of the principal gratifications that accompany use of online SNSs are socializing, tracking down information, and entertainment (Apaolaza, He, & Hartmann, 2014; Chua, Goh, & Lee, 2012; Diddi & LaRose, 2006; Dunne, Lawlor, & Rowley, 2010; Ko, Cho, & Roberts, 2005; Lee, Goh, Chua, & Ang, 2010; Lin, Salwen, & Abdulla, 2005; Park, Kee, & Valenzuela, 2009). A very limited number of studies has even addressed and confirmed these gratifications in the specific case of Chinese SNSs (Chu & Choi, 2011; Jackson & Wang, 2013; Ku, Chu, & Tseng, 2013; Wang et al., 2012).

Socializing stands out among the foremost and most-researched gratifications that teenagers derive from SNS use (Boyd, 2007; Chen & Marcus, 2012; Howard & Corkindale, 2008; Kim, Sohn, & Choi, 2011; LaRose & Eastin, 2004; Lee & Ma, 2012; Liu, 2008; Tong, Van Der Heide, Langwell, & Walther, 2008). For instance, Ellison, Steinfield, and Lampe (2007) and Steinfield, Ellison, and Lampe (2008) showed that

Facebook use provided gratifications derived from bridging, bonding, and preserving of social capital. They conclude that the properties of Facebook help to break down the blocks that students with lower self-esteem tend to sense in their off-line relationships. A further study revealed that college students saw socializing as one of the recompenses stimulating them to participate in Facebook groups (Park et al., 2009). Research based on focus group discussions suggests that Facebook is a place where users locate old acquaintances ex-school friends, contact them, and catch up on their movements. Maintenance of relationships seems to be a crucial motive for SNS use. In adolescence, young people need to express themselves and have a sense of group belonging. SNS-socialization brings them into proximity with others, where opinions are exchanged, and where they feel they have a voice (Dunne et al., 2010). On the other hand, Urista, Dong, and Day (2008) suggested that SNS users frequent them because they can selectively, efficiently, and immediately find scope for their interpersonal communication with others, providing a constant and uninterrupted channel for seeking acceptance and endorsement from other people.

Secondly, *information-seeking* gratification alludes to the fact that SNSs constitute a useful and timely source of knowledge about what is going on, in terms of fashion, concerts, what is new, etc. These online platforms provide a space where the hottest topics can be shared by young consumers (George, Dellasega, Whitehead, & Bordon, 2013; Lee & Ma, 2012; Luo, 2002; Papacharissi & Rubin, 2000). It can therefore be supposed that information-seeking gratifications are produced both by seeking out information and then pooling it with other like-minded users (Ko et al., 2005; LaRose & Eastin, 2004; Leung, 2007).

The third category, *entertainment*, covers the role played by social media in offering a service of entertainment and a let-out from stress. Qzone, for instance, provides a variety of online games that users can get involved with. SNSs are not restricted then to the provision and satisfaction of basic information demands, but also offer a space for fun. Entertainment is an emotional gratification rooted in having a good time, and keeping boredom at bay. Many people use SNSs to feel good in their spare time and occupy otherwise dull moments. In this regard, Qzone provides a variety of online games that users can get involved with in the company of their friends. From his investigation around pleasure-oriented or hedonic information systems including online games, Van der Heijden (2004), identified enjoyment and pleasure as motors for interacting with a hedonic system that is designed to be an end in itself. Many researchers have seen SNSs as constituting recreational systems along these lines (Kang & Lee, 2010; Lee et al., 2010; Lin & Lu, 2011; McQuail, 2005; Nov, Naaman, & Ye, 2010; Sledgianowski & Kulwiwat, 2009), because the user is drawn back into their orbit due to the very excitement and pleasurable intensity they sense when involved in social networking.

Based on the aforementioned findings, in this research we suggest that a positive relation exists between the main gratifications stemming from the use of online social networks and the degree of interaction between adolescents and brands in SNSs. The greater the perceived gratifications, the higher may be the motivation to interact with other SNS members, and therefore also the higher the probability to

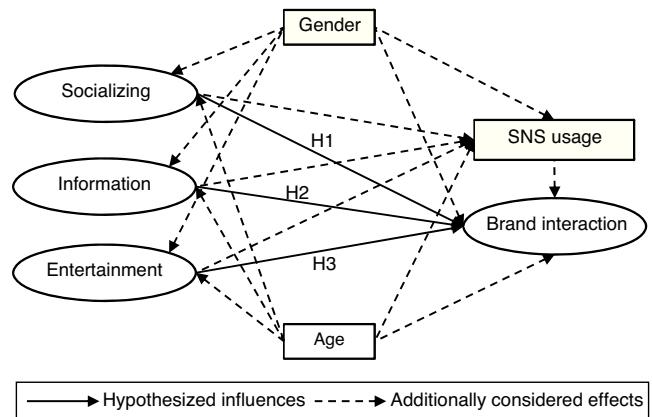


Figure 1 Conceptual model.

interact with the online presence of commercial brands in the social network. Accordingly, we propose that the greater the perception of entertainment, socialization and provision of helpful and timely information in SNSs by adolescents, the greater is their interaction with brands within the social network:

- H1. Gratifications received from SNS-socializing have a positive effect on adolescents' brand interactions on the SNS.
- H2. Gratifications received from SNS-information-seeking have a positive effect on adolescents' brand interactions on the SNS.
- H3. Gratifications received from SNS-entertainment have a positive effect on adolescents' brand interactions on the SNS.

In addition to the hypothesized relationships, a number of further variables were considered in the subsequent empirical model to allow for a more realistic assessment of hypotheses and a more complete modeling of brand interaction on SNSs. Thus, it was further proposed that the hypothesized gratifications may also in first place affect usage intensity of SNSs and that usage intensity, in turn, may have a significant positive influence on brand interaction. In addition, socio-demographic variables gender and age may also reveal to have some impact on SNS gratifications, usage intensity, and brand interactions. Since these additional propositions were not central to the hypothesized framework based on U&G theory, no formal hypotheses were suggested. The conceptual model is depicted in Fig. 1.

Method

Sample and procedure

After obtaining the corresponding permissions from seven Shanghai high-school centers and expressed parental consent, we conducted self-administered surveys on a total sample of 220 Chinese adolescents aged 14–19 years ($M = 16.71$), 58.6% female and 41.4% male, who possessed Qzone personal profiles. Participation was voluntary and the teenagers participating were informed that their responses would be anonymous. The specific educational centers were

selected by convenience, being located near the university campus from where the field work of the study was coordinated.

Measures

The measures assessing gratifications from information seeking, socializing, and entertainment were adapted from prior U&G research in order to ensure content validity (Apaolaza et al., 2014; Lee & Ma, 2012; Lee et al., 2010; Park et al., 2009). The variables were measured with multiple items on 4-point Likert-type agreement scales. Socializing was assessed with the items "*I feel I can talk more with my friends*", "*I can stay in contact with my friends and get closer to them*", and "*I can interact with my friends when sharing news*". The items for entertainment were, regarding their experience on Qzone, "*I find it pleasant*", "*I find it enjoyable*", and "*I find it exciting*". The construct gratification derived from information seeking was composed of the indicators "*I like Qzone to keep up to date on the latest news and events*", "*It helps me to find helpful information*", and "*It is easy to retrieve information when I need to*". Response categories for all three constructs ranged from *not at all*=1 to *very much*=4.

The degree of adolescents' interaction with brands in the social network Qzone was measured with the indicators "*I usually contact brands within Qzone*", "*I like browsing brands on Qzone*", and "*I usually interact with brands in Qzone*". Response categories for this item as well ranged from *not at all*=1 to *very much*=4 on a 4-point Likert-type agreement scale.

In addition, gender and age were assessed, as well as usage intensity of the SNS, the latter with the item "*How much time do you normally spend a day using the Qzone social network?*" and the following response categories: *less than 10 minutes*=0; *10 to 30 minutes*=1; *31 to 60 minutes*=2; *1 to 2 hours*=3; *2 to 3 hours*=4; *3 to 4 hours*=5; *more than 4 hours*=6, adapted from Valkenburg, Peter, and Schouten (2006). The rational for measuring this construct with one single indicator was based on Bergkvist and Rossiter (2007), who defend the use of single item measures for constructs of a concrete singular object and a concrete attribute.

To address scale validity, a confirmatory factor analysis was conducted employing Maximum Likelihood Estimation with AMOS 20 (Table 1). The fit of the measurement model was satisfactory with a goodness-of-fit index ($GFI = 0.94$), adjusted goodness-of-fit index ($AGFI = 0.91$) (Bollen, 1989; Jöreskog & Sörbom, 1984), normed fit index ($NFI = 0.93$), comparative fit index ($CFI = .98$) (Bentler, 1990), root mean square error of approximation ($RMSEA = 0.04$) (Steiger & Lind, 1980) and root mean square residual ($RMR = 0.02$) (Byrne, 2001; Steiger, 1990). Convergent and discriminatory validity of the measurement scales was assessed following Anderson and Gerbing's (1988) procedure. The test proved adequate scale validity since variance extracted and composite reliability ranged 0.57–0.67 and 0.80–0.86 respectively (Bagozzi & Yi, 1994; Hair, Anderson, Tatham, & Black, 1998), and the square of construct correlations did not exceed 0.29 in any case (Fornell & Larcker, 1981).

Results

To assess the hypothesized construct relationships, a structural equation analysis (SEM) was conducted, also employing Maximum Likelihood Estimation with AMOS 20 (Table 2). Also in the case of this model, fit measures indicate that model fit can be considered very satisfactory with $GFI = 0.94$, $AGFI = 0.91$, $NFI = 0.93$, $CFI = 0.98$ all close to the perfect fit criterion of 1.0, as well as $RMR = 0.02$, and $RMSEA = 0.04$. Furthermore, with a chi-square = 95.26, the chi-square/df value = 1.36 was much lower than the 3.0 cut-off criterion (Kline, 2010).

Results of the structural equation analysis indicate a significant positive influence of gratifications derived from SNS entertainment (standardized regression coefficient ($SRC = 0.27$, $p < 0.01$) on adolescents' brand interaction on the Qzone social network. Thus, hypothesis three is significantly supported by the present data. However, the existence of a positive relation of socializing ($SRC = 0.07$, $p = 0.51$) and information-seeking gratifications ($SRC = 0.00$, $p = 0.97$) on Chinese adolescents' brand interactions on Qzone was not supported by the data. Therefore, hypotheses one and two must be rejected in light of the empirical results.

On the other hand, results revealed significant effects of a number of additional variables analyzed in the SEM analysis. While socializing gratifications did not affect brand interactions, they did indeed increase SNS usage frequency ($SRC = 0.22$, $p = 0.02$). Usage intensity was also marginally significantly influenced by entertainment gratification ($SRC = 0.14$, $p = 0.12$), but not by information gratifications ($SRC = -0.06$, $p = 0.46$). SNS usage frequency did not affect the probability to interact with brands on Qzone ($SRC = -0.02$, $p = 0.78$), ruling out the existence of indirect, mediated effects of user gratifications. Furthermore, participants' age had a significant negative influence on the perception of gratifications from entertainment ($SRC = -0.30$, $p < 0.001$), socializing ($SRC = -0.19$, $p < 0.01$) and information ($SRC = -0.19$, $p < 0.01$), but did not affect SNS usage and brand interaction. Gender (female = 0, male = 1) affected significantly gratifications from information ($SRC = 0.15$, $p < 0.05$), as well as brand interaction ($SRC = 0.20$, $p < 0.01$), with male participants perceiving higher information gratifications and interacting more with brands on Qzone.

Discussion and implications

The role of gratifications derived from SNS use in online brand interactions of young users had not been addressed previously. Thus, the main contribution of this research is to address this gap in the literature by analyzing the influence of three distinct types of media gratifications on adolescent's SNS brand interactions, based on a Uses and Gratifications Theory (Katz & Foulkes, 1962) approach. As a secondary aim, this study contributes to the still scarce scientific literature on Asian SNSs and, in particular, Chinese adolescents' interactions on China based SNSs, such as Qzone. Qzone, despite being the second largest after Facebook in terms of number of users, had not yet been studied in scientific terms.

Table 1 Confirmatory factor analysis: factor loadings, correlations, variance extracted, construct reliability, model fit.

	Factor			
	Entertainment	Socializing	Information	Brand interaction
<i>Indicator</i>				
Qzone use exciting	0.76			
Qzone use enjoyable	0.91			
Qzone use pleasant	0.77			
Talk with friends		0.81		
Stay in contact		0.88		
Interact with friends		0.69		
Keep up to date on news			0.75	
Find helpful information			0.75	
Retrieve information			0.77	
Contact brands				0.77
Browse brands				0.85
Interact with brands				0.80
<i>Correlations</i>				
Socializing	0.54			
Information	0.41	0.37		
Brand interaction	0.28	0.18	0.15	
SNS usage	0.26	0.29	0.09	0.05
Age	-0.29	-0.19	-0.17	0.02
Gender	0.00	-0.04	0.12	0.21
Variance extracted	0.67	0.63	0.57	0.65
Composite reliability	0.86	0.84	0.80	0.85
Model fit	RMR = 0.02; GFI = 0.94; AGFI = 0.91; NFI = 0.93; CFI = 0.98; RMSEA = 0.04			

Note: $p < .001$ in all factor loadings (two-tailed significance tests).

The results of this research demonstrate the existence of a significant positive influence of gratifications provided by entertainment on Chinese adolescents' brand interactions on the Qzone social network. The furthermore hypothesized influences of gratifications from socializing and information seeking were not supported, however. Thus, in contrast to recent findings for the case of Facebook (Tsai and Men, 2013), the results of this research show that when

Chinese adolescent users follow a Qzone brand page, they are primarily driven by entertainment reasons, but not by gratifications derived from information search and provision. Overall, this study also supports the application of U&G theory to explaining users' brand interactions in SNSs.

Findings also provide support to the opinion of some researchers whose recommendation is not to focus brand communication strategies in SNSs on providing information

Table 2 Structural equation analysis: Influence of SNS gratifications on adolescents' brand interactions and SNS usage.

	Dependent variables				
	Entertainment	Socializing	Information	SNS usage	Brand interaction
<i>Independent variables</i>					
Age	-0.30***	-0.19**	-0.19***	-0.08ns	0.08ns
Gender	0.04ns	-0.02ns	0.15*	0.01ns	0.20***
Entertainment				0.14ns	0.27***
Socializing				0.22*	0.07ns
Information				-0.06ns	0.00ns
SNS usage					-0.02ns
Model fit	GFI = 0.94; AGFI = 0.91; NFI = 0.93; CFI = 0.98; RMR = 0.02; RMSEA = 0.04; Chi-square = 95.26; $p = 0.03$; Chi-square/df = 1.36				

Notes: Standardized regression coefficients.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

ns Non-significant (two-tailed significance tests).

about product and brand characteristics, but on creating contents that satisfy the entertainment needs of adolescents (Fosdick, 2012; Kelly et al., 2010; Stafford, 2008; Williams, 2010). In the same regard, Goldsmith and Lafferty (2002) suggest that for brand strategies directed at teenagers to be effective in SNSs, they have to redefine and change their advertising discourse from one centered on the benefits of the product, to a discourse that emphasizes the values and emotional experiences associated with it, trying to entertain, surprise and persuade the user with messages that do more than communicate strict information about the product. To give an example, the different advertising formats that the brand Coca Cola employs in its Facebook profile concentrate on the value of happiness, referring to the qualities of love, music or leisure.

In addition, results showed that socializing gratifications influenced SNS usage. This is consistent with the notion that SNSs are used to meet new people and interact with acquaintances. The more SNSs are perceived to serve socializing purposes, the stronger the motivation to use them. Furthermore, the fact that SNS usage frequency did not affect the probability to interact with brands seems to indicate that the tendency to interact with brands online is not restricted to stronger users, but can be found among all kind of users. This may have implications for branding strategy, since potentially also less intensive users can be successfully engaged via SNS branding. Interestingly, male SNS users perceive higher gratifications from information derived on the SNS and interact more with brands. Possibly, male users are generally more open to online contacts than female SNS participants, who may be more reserved in engaging in contacts outside their social circles. The possibility that this may even constitute a cultural feature, more specific for Chinese than for western female users, should be addressed in future research.

In order to better fulfill users' concerns, desires and interests, advertisers have to understand what drives users to interact with brands in online social networks. Thereby, they will access the tools which will set off brand engagement in customers, leading to the construction of quality relationships. Concretely, what emerges from the results of this investigation is that when Chinese adolescents have a greater perception of entertainment on Qzone, their interaction with brands within the social network increases, in that they are more willing to join in and engage in conversations on companies' Qzone pages. Given that this is the case, therefore, in order to satisfy young customers' entertainment requirements, brand communicators ought to build into their approach a diversity of content that is entertaining and fun, incorporating riddles and jokes, social network games, daily horoscopes, music videos from brand endorsers, and tales of human interest. Brand communicators should therefore focus on content and SNS applications that are entertaining and make it possible to satisfy adolescents' media needs through interactivity and active participation with other users, for instance.

Limitations and future research

This study has a number of limitations derived from its very specific scope. Since the data collection was limited to

Shanghai resident Chinese adolescent users of the Chinese SNS Qzone, results may not immediately be generalizable to users of other SNS, in particular Western ones, for instance Facebook. There may be important differences regarding usage patterns and underlying motives between Chinese and adolescent users from other cultural environments. The study even cannot be considered representative for Chinese adolescents, since the location, Shanghai may have a particular consumer culture, differing from the average Chinese mainland habitant, which, on the other hand, may constitute an argument supporting generalizability, given the more international character of Shanghai. It is therefore recommendable that future studies, to address the generalizability of the present findings, should apply the proposed framework in different cultures and SNSs, in particular, Western ones.

On the other hand, this research has been centered on a U&G theory approach to adolescents' brand interaction in SNSs. For the further development of an explanatory framework on brand interactions in SNSs, future research should integrate additional variables, such as specific gratifications provided by the brand's online presence and further user characteristics, such as brand involvement, interaction tendency, brand trust and user perceptions of brand communications (interest of information provided, message creativity, etc.). A further limitation of this research is derived from the fact that there is still a lack of an established measurement scale for SNS brand interactions, which provides a need and avenue for future developments.

Conflict of interest

The authors declare no conflict of interest.

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