Effects of Narcissism, Leisure Boredom, and Gratifications Sought on User-Generated Content Among Net-Generation Users

Damon Chi Him Poon, The Chinese University of Hong Kong, Hong Kong

Louis Leung, The Chinese University of Hong Kong, Hong Kong

ABSTRACT

This research identifies the gratifications sought by the Net-generation when producing user-generated content (UGC) on the internet. Members of the Net-generation want to vent negative feelings, show affection to their friends and relatives, be involved in others' lives, and fulfill their need to be recognized. These gratifications, to a large degree, were found to be significantly associated with the users' various levels of participation in UGC (e.g., Facebook, blogs, online forums, etc.). What's more, narcissism was predictive of content generation in social networking sites, blogs, and personal webpages, while leisure boredom was significantly linked to expressing views in forums, updating personal websites, and participating in consumer reviews. In particular, the results showed that Net-geners who encountered leisure boredom had a higher tendency to seek interaction with friends online. Implications of findings are discussed.

Keywords: Narcissism, Net-Generation, Leisure Boredom, User-Generated Content, Uses and Gratifications

INTRODUCTION

The internet has become an integral part of the lives of most young adults. It is flourishing even more in the Web 2.0 era. Users are no longer passive recipients of web contents, they can also be contributors. A number of sites, such as Facebook and MySpace, invite users all around the globe to share experiences and self-produced works. Such content contributed by users is called user-generated content (UGC). In this study, UGC includes personal contents produced by end-users in multiple social media platforms, such as Facebook, YouTube, MySpace, Twitter, blogs, and online forums. This content is unrelated to ones' professional work.

UGC on the internet is not merely used for entertainment or passing time, but may also

lead to citizen journalism (Gillmor, 2004) and social movements (Birdsall, 2007). UGCs on social media and various online applications are popular among the "Net-generation," that is, those who were born between the late seventies and mid-nineties (Tapscott, 2009). Members of the Net-generation (Net-geners), are also called digital natives (Prensky, 2001), Generation Y (McCrindle, 2002), Millennials (Howe & Strauss, 1992), and even the Post 80s in China. They are the first generation whose experiences, since their formative years, have been shaped by digital media. Hence, it is assumed that these people have unique attitudes towards technology (Kennedy et al., 2007). Leung (2003) suggested that attitudes and interests among Net-geners are diverse, yet they have the same deeply held values. They believe that they have equal opportunities to access information and are confident in their innovativeness and openness to the outside world. In fact, Net-geners actively join discussions on social issues by generating UGC on the internet. In some countries, such discussions have initiated and consolidated opposition to government policies.

Social network plays an important role in UGC. Kaplan and Haenlein (2010) found that creating content on social networking sites is one of the means through which users connect with friends. The platforms allow users to share photos, video, and to make comment on others' blogs. Blossom (2009) also pointed out that people participate in "social-network publishing" is to share content and build knowledge through discussion.

Employing the uses and gratifications perspective, past studies have examined Net-geners' motivations in their use of the internet; however, the UGC production behavior of Net-geners has not yet been thoroughly explored (Kennedy et al., 2007; Leung, 2003). Being technologically savvy, Net-geners produce immeasurable amounts of content daily using social media. However, the extent to which how personality traits (such as narcissism and leisure boredom) and their gratifications sought affecting their content generation online is largely unknown.

Characteristics of the Net-Generation

Tapscott (2009) identified Net-geners as youths who adapt to new media and are outspoken on the net. They are willing to take the initiative to help their society transform into a more tolerant and open one (Tulgan & Martin, 2001). Net-geners' enthusiasm for the internet is driven by various motivations. Previous research has identified "pleasure of control" and "fluidity of identity" as two properties that seduce Net-geners to the internet. Net-geners are "emotionally open on the net"; they like to share their emotions with others (Leung, 2003; Oblinger & Oblinger, 2005).

Palfrey and Gasser (2008) suggested that the only world digital natives (a synonym to Net-geners) know is a digital one. Unlike prior generations, they grew up with tendencies to multitask, to express themselves, and to connect with others via digital technologies. They enjoy showing off and putting up their most innovative selves in front of the world. Meanwhile, Jones, Ramanau, Cross, and Healing (2010) questioned the existence of the Net-generation. They argued that there are significant variations among students who were born after 1983.

The emotions shown by the Net-geners on the internet are diverse. Members of the Net-generation dare to speak out on issues they are not content with. Net-geners share their feelings and encourage online discussion. For example, users are keen to vent their negative feelings on consumer review sites (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004). Politically, Tapsoctt (2009) noted that Net-geners might have negative views on current regimes and might oppose society's conservative values. They want to "shake it up" by being outspoken on the internet, as well as collaborating with politicians. Net-geners use technology as a means to connect with friends in their real life (Howe & Strauss, 2000). Interactions between Net-geners and their friends can be

characterized as encouraging, thanks-giving, and opinion-sharing.

THEORETICAL FRAMEWORK

Gratifications from Generating Content Online

The users' decision making process in selecting media has been one of the major topics in technology development (Stafford, Stafford, & Schkade, 2004). The uses and gratifications (U&G) approach studies the underlying motivations and goals of an audience as it engages in various forms of media (Leung, 2009). U&G assumes that a particular audience actively chooses mass media to fulfill its own needs and that the process is goal-directed (Katz & Blumler, 1974). Rosengren (1976) concluded that users' needs are based on their social and psychological origins. If their expectations on the media grow, their engagement with the media is affected. After using the media, gratifications, expected or unexpected, are obtained. Past research has identified two major forms of media gratifications: content gratifications and process gratifications (Cutler & Danowski, 1980; Stafford & Stafford, 1996).

As the internet is media-like in nature, theorists believe that the U&G perspective is suitable for internet studies (Johnson & Kaye, 2003; Lin, 1999; Weiss, 2001). Ruggiero (2000) suggested that U&G studies regained their significance after computer-mediated communication (CMC) became a popular area of research because technologies provide people with a huge range of media choices; hence, the motivations and satisfactions obtained were more crucial in the analysis of audiences. Aside from those similar to traditional media, users may obtain newly identified gratifications such as personal involvement and relationship bridging and bonding from the internet (Eighmey & McCord, 1998).

Past research on internet use has studied gratifications obtained from the internet in general (Papacharissi & Rubin, 2000) and from specific applications, including e-mail (Dim-

mick, Kline, & Stafford, 2000), ICQ (Leung, 2001), social networking sites (Dunne, Lawlor, & Rowley, 2010), computer-based voice over Internet protocol (VoIP) phone service (Park, 2010), and online community (Lampe, Wash, Velasquez, & Ozkaya, 2010). However, few studies have explored the motivations and gratifications obtained from generating online content. Leung (2009) found that social needs, cognitive needs, and entertainment needs motivate users to produce online content. His study also reasserts that psychological empowerment can be enhanced by one's degree of online content generation and by one's attitude and behavior in civic engagement offline. Likewise, Hess, Rohrmeier, and Stoeckl (2007) revealed that video-bloggers are keen on having fun and passing time, while web-bloggers are keen on disseminating information.

The pursuit of personal identity and the need for recognition have been identified as gratifications obtained from internet use (Papacharissi & Rubin, 2000) and from generating content online (Leung, 2009). Park, Kee, and Valenzuela (2009) claimed that status-seeking is a primary need for those using social networking sites. Grace-Farfaglia, Dekkers, Sundararajan, Peters, and Park (2006) also identified social support, fame, and respect as the gratifications obtained by web users in different countries.

Each form of media offers a unique combination of content, typical attributes, and exposure situations. Therefore, each medium has a unique ability to satisfy users' various needs (Katz, Blumler, & Gurevitch, 1973). However, U&G studies on Net-geners' online UGC production behavior are still scarce; this research aims to fill that gap. Based on the uses and gratifications framework, this exploratory research extends previous findings and poses the following research question:

RQ$_1$: What motivates Net-geners to produce content online?

H$_1$: The more gratifying that Net-geners find in online content generation experiences, the more they will participate in user-generated content activities.

Leisure Boredom

Boredom is a fleeting emotional state in which someone lacks interest and is unable to concentrate (Fisher, 1993). In leisure time, if the time is not optimally spent, people may experience leisure boredom (Iso-Ahola, 1980). Net-geners encounter boredom easily and need to participate in various activities in order to prevent or overcome it (Harrison, 2005). Past research found that people who encounter higher levels of leisure boredom are more likely to be addicted to or led to overuse of mobile phones (Leung, 2008). Lin, Lin, and Wu (2009) discovered that leisure boredom is a possible reason for adolescents' internet addictions; adolescents who are fond of family and outdoor leisure activities reported lower levels of internet addiction.

Studies on the relationship between leisure boredom and user-generated content are rare. As many Net-geners may now contribute content to Facebook, YouTube, Twitter, blogs, and online forums during their leisure time, it is increasingly pressing to examine the effect of leisure boredom on their participation in user-generated content online. Thus, we hypothesize that:

H_{2a}: Subjects who score high on levels of leisure boredom will report a higher frequency of producing online content.
H_{2b}: Subjects who score high on levels of leisure boredom will find online content generation experiences more gratifying.

Narcissism

Narcissism is the fascination with oneself. Freud (1914) explained that narcissism is derived from the human instinct for "self-preservation." Foster and Campbell (2007) suggested that narcissism is part of social psychology. They found that all people are narcissistic in some way. Brown, Budzek, and Tamborski (2009) supported that narcissism is dimensional and not categorical, with grandiosity and entitlement as the two most general clusters. Campbell and Foster (2007) conducted a literature review on narcissism and concluded that several of the values of narcissists include: thinking they are

better than others; unusually inflated praise of themselves; the belief that they are unique and special; and often selfish and success-oriented.

Some researchers believe that young people are becoming increasingly narcissistic. Twenge, Konrath, Foster, Campbell, and Bushman (2008) conducted a survey among a sample of over 16,000 college students over time and found that recent subjects are more narcissistic than those from 1979. The respondents' mean score in the Narcissism Personality Inventory had increased by .33 standard deviations in 27 years' time. In some ways, narcissism has encouraged online activities. Buffardi and Campbell (2008) found that narcissism predicts higher participation in social networking sites, such as Facebook. The online content generated might reflect the producer's level of narcissism. Thus, we hypothesize that:

H_{3a}: Subjects who are more narcissistic will report a higher frequency of online content production.
H_{3b}: Subjects who are more narcissistic will find online content generation experiences more gratifying.

Furthermore, this exploratory study also inquires:

RQ_2: How are gratifications sought from UGC predicted by demographics, leisure boredom, and narcissism among Net-geners?
RQ_3: To what extent can demographics, motives for online content generation, leisure boredom, and narcissism in Net-geners predict their participation in producing online content?

METHOD

Data Collection and Sampling

Data for this exploratory study were gathered using an online survey on http://www.my3q.com with a snowball sampling of 344 Net-geners, aged 13–33 years. The questionnaire was pilot tested prior to the actual fieldwork.

The actual questionnaire was posted online between March and April, 2010. Among the respondents, 47.4% were male, and 63.7% had a median monthly personal income of under US$1,290. Regarding education, 1.5% of the respondents had completed elementary school, 25% had completed high school, 5.8% had obtained associate degrees, and 67.7% were university graduates or above.

Measures

Gratifications of internet content generation. In early 2010, a focus group comprised of 12 Net-geners was conducted to assess their gratifications sought in online content generation. Results were combined with similar gratification items found in a number of previous U&G studies, including predictors of internet use (Papacharissi & Rubin, 2000), Net-geners' attributes and internet use (Leung, 2003), online consumer-opinion platforms (Hennig-Thurau et al., 2004), and user-generated content on the internet (Leung, 2009). The final questionnaire consisted of 20 gratification statements. Respondents were asked how much they agreed with the items using a five-point Likert scale with 1 = "strongly disagree" and 5 = "strongly agree."

Leisure boredom. Leisure boredom was measured using a short version of the Leisure Boredom Scale, developed by Iso-Ahola and Weissinger (1987). Five relevant items were extracted from the original 20-item scale, such as "In my leisure, I usually don't like what I'm doing, but I don't know what else to do," and "leisure time activities do not excite me." A five-point Likert scale was used with 1 = "strongly disagree" and 5 = "strongly agree." The Cronbach's alpha was modestly high at .79.

Narcissism. To assess narcissism, an established scale, called Narcissistic Personality Inventory (NPI) was used. Raskin and Hall (1979) developed NPI in order to measure differences in narcissism among individual who are not narcissistic. Raskin and Terry (1988) then discovered that the original 40-item inventory could be divided into seven components. However, to make the questionnaire more manageable, only five items were extracted from the inventory in this research with statements such as "I really like to be the center of attention" and "I want to amount to something in the eyes of the world." A five-point Likert scale was also used with 1 = "strongly disagree" and 5 = "strongly agree." These items yielded a reasonably high reliability alpha of .78.

User-generated content. Respondents were then asked about their perceived level of participation in publishing various forms of user-generated content online. The six main forms of UGC included: social networking sites, video sites, blogs, personal web-pages, forums, and consumer reviews. Respondents self-reported their perceptions in their level in content generation online on a five-point scale with 1 = "never," 2 = "seldom," 3 = "neutral," 4 = "often," and 5 = "very often." Table 1 shows that content generation on social networking sites is the most popular (with a mean score of 3.74), video sites came second (M = 2.88), blogging came third (M = 2.75), and personal web-pages (M = 2.06) were the least popular.

Participation in overall online content generation. Respondents were asked to cumulatively estimate the amount of time they participated in content generation online on an average day in the previous week (in minutes).

Demographics. Personal data, such as gender, education, and personal income were solicited.

FINDINGS

The Motives of Net-Geners in Generating Online Contents

To answer the first research question, a principal components factor analysis with varimax rotation was run to determine the potential groupings of 20 motivation items on UGC among

Table 1. User-generated content online

User-Generated Content	Mean	SD
1. Social Networking (e.g., Facebook)	3.74	1.23
2. Video Sites (e.g., YouTube)	2.88	1.32
3. Blogs (e.g., Windows Live, Twitter)	2.75	1.22
4. Personal web-page	2.06	1.13
5. Forums	2.56	1.24
6. Online reviews (e.g., OpenRice, ESDLife)	2.19	1.15

Scale used: 1=never, 2=seldom, 3=neutral, 4=often, and 5=very often; (N=344)

the Net-geners. With low communalities, two items were excluded from the analysis. The remaining 18 items yielded four factors with an eigenvalue greater than 1.0, and explained 61.02% of the variance (Table 2).

The first factor was "affection," which showed how Net-geners' online content generation was motivated by the intention to encourage others, help others, disclose their own feelings, and thank others. The Cronbach's reliability alpha of the five items was high at .90. The second factor was "recognition needs" (alpha = .83). This factor consisted of five statements reflecting that, in producing content online, Net-geners hoped to establish a personal identity, build confidence, promote or publicize expertise, and gain respect. "Inclusion" was the third factor (alpha = .76), revealing that Net-geners generated online content because they needed to talk or be with someone, needed to talk about their problems, and needed to feel involved with other people's affairs. The last factor was "venting negative feelings" (alpha = .74), articulating how respondents saw producing content online as an opportunity to deal with their negative feelings, to voice discontent, to fight injustice, and to vent anger.

In sum, the four factors are conceptually consistent with the theoretical expectations of the previous studies in our literature review. Generally, Net-geners are concerned about their friends and they like to show affection to others. In addition, Net-geners want to be involved in others' lives and are emotionally open. They are in need of recognition and hope to gain confidence, respect, and support, and they find promoting their own expertise satisfying. Net-geners do not hide their negative feelings; they are willing to express them as a method of relief.

Relating Gratifications to UGC Online

To test H_1 that the more gratifying that Net-geners find online content generation experiences, the more they will participate in user-generated content activities online, a bivariate correlation analysis was run (Table 3). The results show that affection (r = .15, $p < .01$), recognition needs (r = .21, $p < .001$), inclusion (r = .25, $p < .001$), and venting negative feelings (r = .22, $p < .001$) were significantly associated with overall participation in UGC. Bivariate correlations between gratifications sought and specific UGC platforms also support such results. For example, venting negative feelings was found significantly related to content generation in social networking sites (r = .13, $p < .05$), on video sites (r = .15, $p < .01$), in blogs (r = .18, $p < .001$), on personal web-pages (r = .18, $p < .001$), in forums (r = .16, $p < .01$), and in writing reviews (r = .16, $p < .01$).

Table 2. Net-geners' gratifications for producing UGC online

	Factors				Mean	SD
	1	2	3	4		
Affection						
1. To show others encouragement	.89				3.79	1.01
2. To let others know I care about their feelings	.83				3.71	1.03
3. Because I am concerned about others	.80				3.54	1.03
4. To help others	.79				3.57	1.03
5. To thank others	.75				3.75	.97
Recognition needs						
6. To build up my confidence		.77			2.80	1.00
7. To establish my personal identity		.75			3.02	1.13
8. To gain respect and support		.73			3.23	1.02
9. Because it is satisfying		.72			3.29	1.10
10. To promote or publicize my expertise		.67			3.11	1.06
Inclusion						
11. Because I need someone to talk to or be with			.86		3.13	1.03
12. Because I just need to talk about my problems sometimes			.85		3.30	1.04
13. To feel involved with what's going on with other people			.62		2.86	.96
14. To understand myself and others			.55		3.42	.97
Venting Negative Feelings						
15. To voice discontent				.82	3.39	1.03
16. To fight injustice				.78	3.22	1.03
17. Because someone hurt me and I wish to hurt him back				.70	2.36	1.08
18. To vent anger				.61	3.08	1.18
Eigenvalue	6.07	2.74	2.06	1.33		
Variance explained	30.35	13.71	10.31	6.65		
Cronbach's Alpha	.90	.83	.76	.74		

Scale used: 1=strongly disagree and 5=strongly agree; (N=344)

Similarly, the results in Table 3 also show that the more Net-geners' motivation for using UGC was inclusion, the more content they would produce on personal web-pages (r = .21, *p* <.001), in forums (r = .22, *p* <.001), and in writing consumer reviews (r = .16, *p* <.01). Likewise, the more they reported UGC was for recognition, the more they would participate in blogs (r = .17, *p* <.001), personal web-pages (r = .11, *p* <.05), and forums (r = .12, *p* <.05). The more they used UGC to show affection, the more active they would be on social networking sites (r = .26, *p* <.001), such as Facebook and

Table 3. Linear regression of demographics, gratifications, and Net-geners attributes on user-generated content

| | Participation in User-Generated Content | | | | | | | | | | | | | |
| | Overall UGC (minutes/day) | | Social networking | | Video sites | | Blogs | | Personal web-page | | Forums | | Consumer Reviews | |
	r	β	r	β	r	β	r	β	r	β	r	β	r	β
Demographics														
Gender (male=1)	-.05	.03	-.12*	-.05	-.02	-.02	-.10	-.07	-.12*	-.10	.10	.13*	-.11	-.08
Education	.11	.04	.14**	.07	.00	-.03	.04	.02	.01	.00	.00	.02	.16**	.10
Income	.09	.11*	.10	.08	.10	.12*	-.09	-.06	-.04	.00	-.04	-.01	.21***	.22***
Gratifications														
Affection	.15**	.16**	.26***	.22***	.03	.04	.09	.08	-.02	.00	.12*	-.07	.00	.02
Recognition	.21***	.18***	.03	-.01	-.01	-.01	.17***	.13*	.11*	.08	.12*	.11*	.09	.07
Inclusion	.25***	.24***	.06	.06	.02	.00	.09	.04	.21***	.14**	.22***	.21***	.16**	.12*
Vent negative feelings	.22***	.20***	.13*	.12*	.15**	.13*	.18***	.15**	.18***	.14**	.16**	.15**	.16**	.13*
Net-geners' attributes														
Leisure boredom	.07	.07	-.13*	-.13*	.06	.06	.09	.09	.23***	.23***	.22***	.22***	.19***	.19***
Narcissism	.19***	.11	.17***	.16**	.05	.04	.25***	.19***	.19***	.12*	.12*	.04	.06	.01
R^2		.20		.14		.04		.13		.14		.14		.15
Adjusted R^2		.18		.12		.01		.10		.12		.12		.13
F		9.53***		6.01***		1.56		5.37***		6.17***		6.04***		6.74***

$*p \leq .05; **p \leq .01; ***p \leq .001; (N=344)$

Scale used: 1 = "never," 2 = "seldom," 3 = "neutral," 4 = "often," and 5 = "very often"

Table 4. Regressing gratifications sought on demographics and Net-geners' attributes

| | Gratifications Sought | | | | | | | |
| | Affection | | Recognition | | Inclusion | | Venting negative feelings | |
	r	β	r	β	r	β	r	β
Demographics								
Gender (male=1)	-.13*	-.10	-.24	-.01	-.15**	-.16**	-.26	-.04
Education	.12*	.10	.13*	.13	-.03	-.56	-.02	-.05
Income	.01	-.04	-.01	-.02	-.06	-.34	.06	.10
Attributes								
Leisure boredom	-.23***	-.23***	.02	.01	.20***	.21***	.09	.09
Narcissism	.01	.03	.18***	.17**	.06	.04	.10	.11*
R^2		.08		.05		.07		.03
Adjusted R^2		.06		.04		.06		.02
F		5.72***		3.48**		5.06***		1.87

*$p \leq .05$; **$p \leq .01$; *** $p \leq .001$; (N=344)

MySpace, and forums ($r = .12$, $p < .05$). Therefore, H₁ is fully supported.

Relating Leisure Boredom to UGC Online and Gratifications

H₂ₐ proposed that subjects who score high on level of leisure boredom will report a higher frequency of online content production. The results in Table 3 show that leisure boredom was not significantly related to the overall amount of UGC participation. However, leisure boredom was found significantly and positively correlated to content generation on personal web-pages ($r = .23$, $p < .001$), in forums ($r = .22$, $p < .001$), and in writing consumer reviews ($r = .16$, $p < .01$), and negatively linked to social networking sites ($r = -.13$, $p < .05$). Thus, H₂ₐ receives only limited support.

H₂ᵦ hypothesized that subjects who score high on level of leisure boredom will find online content generation experiences more gratifying. The bivariate correlation results in Table 4 show that leisure boredom was significantly and negatively correlated to affection ($r = -.23$, $p < .001$), but positively related to inclusion ($r = .20$, $p < .001$). Therefore, H₂ᵦ is rejected.

Relating Narcissism to UGC Online and Gratifications

H₃ₐ proposed that subjects who are more narcissistic will report a higher frequency of online content production. The results in Table 3 indicate that narcissism was significantly associated with overall participation in UGC ($r = .19$, $p < .001$). In particular, it is significantly linked to content generation in social networking sites ($r = .17$, $p < .001$), blogs ($r = .25$, $p < .001$), personal web-pages ($r = .19$, $p < .001$), and forums ($r = .12$, $p < .05$). Thus, H₃ₐ is fully supported.

H₃ᵦ proposed that subjects who are more narcissistic will find online content generation experiences more gratifying. The correlation results in Table 4 reveal a significant relationship only between narcissism and recognition

(r = .18, p <.001). Therefore, H_{3b} receives limited support.

Predicting Gratifications Sought in UGC

The regression results in Table 4 show that leisure boredom is significantly and negatively linked to affection (β = -.23, p < .001), but positively related to inclusion (β = .21, p < .001). This indicates that Net-geners who scored high in leisure boredom would be less likely to show others encouragement and to let others know they care about their feelings. However, leisurely bored individuals would be more gratified if they could talk to or be with someone, talk about their problems, and feel involved with what is going on with other people. Narcissistic individuals were also found significantly associated with recognition seeking (β = .17, p < .001) in UGC. This suggests that narcissistic individuals use UGC to build up confidence, establish personal identity, gain respect and support, and promote or publicize their expertise. Females were gratified more by inclusion (β= -.16, p<.01), while income and education were not predictors for any of the gratifications. Amount of variances explained ranged from 4% to 6%.

Predicting the Level of UGC Generation

The regression results in Table 3 show that all gratifications were significantly linked to overall participation in UGC. Respondents who scored high in inclusion (β = .24, p<.001), venting negative feelings (β = .20, p<.001), recognition needs (β = .18, p<.001), and affection (β = .16, p<.01) tended to report that they actively participated in UGC. Such results indicate that Net-geners who spend a large amount of time generating online content were motivated by their desire to voice their dissatisfaction, gain recognition from others, and to be involved in their friends' lives.

In particular, while looking into UGC activities in various applications, individuals who were active in social network sites tended to be motivated by affection (β = .22, p<.001) and venting negative feelings (β = .12, p<.05), were low in leisure boredom (β = -.13, p<.05), and high in narcissism (β = .16, p<.01). Heavy blog users tended to be narcissistic individuals (β = .19, p<.01) who sought recognition (β = .13, p<.05) and wanted to vent negative feelings (β = .15, p<.01). Individuals creating and maintaining a personal webpage tended to be leisurely bored (β = .23, p<.001), narcissistic (β = .12, p<.05), and motivated by inclusion (β = .14, p<.01) and venting negative feelings (β = .14, p<.01). People who were active in forums tended to be males with a great deal of free leisure time and bored (β = .22, p<.001), motivated to produce UGC by inclusion (β = .21, p<.001), recognition (β = .11, p<.05), and voicing discontent (β = .15, p<.01). Those who liked to be online critics were motivated by venting negative feelings (β = .13, p<.01), inclusion (β = .12, p<.05), and were bored with a great deal of free time (β = .19, p<.001). Amount of variance explained ranged from 10% to 18%. The R-square for video sites was not significant; hence participation in UGC on video sites was not affected by demographics, gratifications, and attributes of the Net-geners.

CONCLUSION AND DISCUSSION

This study successfully identified four motivations that influence the generation of online content by Net-geners: affection, recognition needs, inclusion, and venting negative feelings. The results confirm the characterization of Net-geners from previous research: 1) recognition is an important gratification sought in producing UGC online (Leung, 2009); 2) Net-geners connect and socialize with friends via various technologies (Howe & Strauss, 2000); 3) Net-geners do not hesitate to speak out on what they feel is unjust (Tapscott, 2009); and 4) Net-geners are emotionally open on the net (Leung, 2003; Oblinger & Oblinger, 2005).

Apart from the four motivations mentioned above, Net-geners' personality traits are the

other determining factors influencing them to produce UGC online. Net-geners who reported higher levels of leisure boredom produced more UGC in some applications, such as personal web-pages, forums, and consumer reviews. This explains the notion that leisure boredom may be a possible reason for adolescents' internet addictions (Lin, Lin, & Wu, 2009). In addition, the result that Net-geners who reported a higher level of leisure boredom were positively linked to inclusion and negatively to affection may be explained by the fact that leisurely bored Net-geners found UGC an effective means to relieve boredom through interpersonal interaction in their preferred social medium, to build friendships or seek companions; but it may not be the right channel to show affection.

As expected, the level of narcissism predicted the level of participation in UGC, especially in social networking sites, blogs, and personal webpage. Such results indicate that narcissists like to show their talents, gain recognition, and promote their expertise. These findings are in line with Raskin and Terry (1988) showing that narcissism is significantly linked to higher levels of social activity in the online community and more self-promoting content on social networking web pages.

It is interesting to note that Net-geners sought different gratifications from various UGC platforms. In particular, venting negative feelings was the most powerful motivation for content generation on blogs, forums, personal web-pages, consumer reviews, and social networking sites. Inclusion was less influential as it predicted only three out of six UGC platforms. This may be because many of these platforms are less interactive, which allows more room for the users to present themselves in an asynchronous fashion. Some Net-geners may voice their dissatisfaction against social injustice online. Society should pay attention to such voices, because negative views may quickly diffuse through the internet. As many may seek guidance from political information online, views on the internet may quickly transform into mobilizing power for the Net-geners (Kaye & Johnson, 2002).

Affection was the only strong predictor for the use of social networking sites. As the main use of these sites is communication among friends, it is logical that Net-geners would want to show affection on such sites. Besides, the recognition needs of Net-geners do affect their contributions to forums and blogs. Among the UGC platforms, personal web-pages provide the largest degree of freedom, but they also require the highest level of technical skill. Net-geners can showcase their artwork, design, and programming skills on their pages in order to gain respect from others.

Demographics were shown to have little effect on UGC production level among Net-geners. However, one interesting finding is that income level acts as a strong positive predictor of content generation in online review sites, such as restaurant reviews. This may mean that people with greater spending power have more consumption experience, or that they consider themselves superior and more qualified to comment. The "digital divide" between Net-geners is narrowing. The limited effect of demographics on participation in UGC showed that, as computer hardware and broadband are becoming more affordable, more Net-geners are turning to UGC to satisfy their social and psychological needs. The diversity of content that Net-geners can produce is also appealing to most members of this generation. Therefore, it is shown that Net-geners have fairly equal opportunities and interests in contributing to UGC online.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Although the U&G framework is, as expected, a set of well-established media use predictors, further research on this issue is worthy of consideration. For example, content analysis of UGC may help to further explain the limited amount of variance in the regression analyses. As well as "venting negative feelings", the examination of the expression of "positive"

feelings is also important for the establishment of a comprehensive typology in the gratification of UGC on the internet. In addition, researchers in politics and marketing may be interested in identifying which UGC platforms contain more negative views, and studying the characteristics of the content on these platforms. Researchers might examine to what degree audiences of these platforms may be affected by the content. Future research may also study the extent to which Net-geners mobilize their friends online by UGC.

Mobile communication is not only an important aspect of technological trends in the 21st century, but it may also impact UGC (Hanson & Baldwin, 2007). The physical venues of producing UGC were not investigated in this research, so the relationship between UGC and mobile technology is worth exploring. Unlike other platforms, the insignificant R-square in the regression equation for UGC in video sites suggests that the predictors selected in this study were ineffective. Future research should explore other important variables which may be able to explain why Net-geners create video contents on the web.

A number of limitations should be recognized in this study. First, this exploratory study employed snowball sampling, based in Hong Kong, and was biased toward university educated, so generalization of the results to the global population may not be justified. It is suggested that future studies explore other settings to compare different cultures in UGC. Second, this research was cross-sectional and only tested the relationships between variables. Follow-up research is recommended to investigate the causal relationships between these variables. Third, the study asked respondents to self-report their perceived participation level in terms of time spent producing UGC. Future studies should assess the volume and specific type of content produced. Furthermore, the survey focused on the Net-geners, hence the comparison with other age groups was not presented. Future research should explore the differences between Net-geners and other age cohorts.

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