



User-generated content on the internet: an examination of gratifications, civic engagement and psychological empowerment

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Abstract

As they relate to user-generated content on the internet, civic engagement and psychological empowerment have received significant interest in recent years. While past studies have examined online civic participation and political empowerment, the way in which civic engagement offline and content generation online are related to psychological empowerment has not been thoroughly explored. The purpose of this study is to address the roles that gratifications of content generation online (e.g. satisfying recognition needs, cognitive needs, social needs and entertainment needs) and civic engagement offline play in predicting levels of user-generated content on the internet; and how the gratifications of content generation online, civic engagement offline and user-generated content influence the three components of psychological empowerment (i.e. self-efficacy, perceived competence and desire for control). This study reasserts that psychological empowerment can be

enhanced by one's degree of content generation online and by both one's attitude and behavior in civic engagement offline.

Key words

civic engagement • psychological empowerment •
user-generated internet content • uses and gratifications

INTRODUCTION

User-generated internet content has exploded in recent years. Sites such as Facebook (www.facebook.com), MySpace (www.myspace.com), MSN Spaces (<http://home.spaces.live.com>), Blogger (www.blogger.com), YouTube (www.youtube.com) and Wikipedia (www.wikipedia.org) have helped to establish viable business models based on lively forums, blogs and personalized social network sites where users can publish their own diaries on their own websites, post photos or videos, express opinions, meet other users and establish communities based on shared interests. Under the Web 2.0 environment and enabled by an outburst of free publishing tools, user-generated content is influencing traditional media and giving an independent voice to viewpoints previously disenfranchised by the corporate media. Within Web 2.0, the web is seen as a platform for service delivery which emphasizes user control, participation and emergent behavior and can be defined as a way of creating pages focusing on microcontent and social connections between people (Alexander, 2008; Herring et al., 2005; O'Reilly, 2005). One common form of user-generated content in Web 2.0 is citizen journalism. Citizen journalism is the act of a citizen or group of citizens playing an active role in the process of collecting, reporting, analyzing and disseminating news and information (Gillmore, 2006). The intent of this participation is to provide the independent, reliable, accurate, wide-ranging and relevant information that a democracy requires. Citizen journalism has the power to break a story and create some attention for that story in the blogosphere. Citizen journalism came to prominence in the aftermath of 9/11, the tsunami disaster in South-East Asia, Hurricane Katrina in the USA and the Sichuan earthquake in China as eyewitness accounts and survival stories, complete with photographs, began to appear on the internet and in blogs. Although BBC, CNN and other international news organizations employ thousands of professional news reporters, these reporters will never be as omnipresent as the millions of people carrying camera phones who can act as journalists. This phenomenon is amplified when a story is produced and posted first on the web, then re-aired by mainstream TV networks. Thereafter, the story may reverberate a second time when bloggers redistribute it through websites such as YouTube. With citizen journalism, the boundary between information senders and recipients is abolished and

gatekeeping is eliminated (Hall, 2001; Poster, 1995). All these activities may further encourage and empower average persons to become journalists and share their voices.

User-generated content on the internet, civic engagement and psychological empowerment have received significant interest in recent years due to the Web 2.0 phenomenon. While there have been studies which have examined online civic participation and political empowerment (Uslaner, 2007; Zimmerman and Rappaport, 1988), the way in which civic engagement offline and content generation online are related to psychological empowerment has not been thoroughly explored. Does user-generated content on the internet facilitate or impede psychological empowerment? In explaining media behavior and its consequences, examining the objectives and underlying assumptions of uses and gratifications perspectives seems to constitute a good approach for the study of content generation on the internet. What motivates users to create content online and how the gratifications of generating internet content, psychological empowerment and civic engagement affect internet content-generation activities are important research topics.

THEORETICAL FRAMEWORK

Gratifications of generating internet content

Wimmer and Dominick (1994) proposed that uses and gratifications began when researchers became interested in why audiences engage in various forms of media behavior, such as watching television (Rubin, 1983). Uses and gratifications theory assumes that audience members actively seek out the mass media, fulfill expectations and actively select media and media content to satisfy individual needs. The most important assumption of this approach is that the audience is active and media use is goal-directed. As early as the mid-1970s, Rosengren (1976) suggested that certain basic needs interact with personal characteristics, and that the social environment of the individual would produce different motives and gratification behaviors which could come from using a particular media or other activities.

Previous studies of uses and gratifications on computer-mediated communication (CMC) tools include such devices as email (Dimmick et al., 2000), the internet (Flanagin and Metzger, 2001; Papacharissi and Rubin, 2000; Parker and Plank, 2000), Short Message Service (SMS, 'texting'; Leung, 2007) and ICQ ('I Seek You'; Leung, 2001). So far, only a few studies have examined the gratifications or motives associated with user-generated content online. For example, Papacharissi (2003) analyzed the content of 150 English-language bloggers and revealed that blog posts were intended for friends or family to fulfill a social utility motivation. In the

content analysis of 358 randomly selected front pages of Polish language blogs, researchers explored six major motivations for blogging:

- 1 self-expression;
- 2 social interaction;
- 3 entertainment;
- 4 passing the time;
- 5 information; and
- 6 professional advancement (Trammell et al., 2004).

Nardi et al. (2004) interviewed 23 bloggers in California and identified documenting one's life, providing commentary and opinions, expressing deeply felt emotions, articulating ideas through writing as well as forming and maintaining community forums as five major motivations for blogging. Based on these conceptual dimensions and grounded in the uses and gratifications framework, this exploratory study seeks to expand previous research by addressing a broad research question and a hypothesis:

RQ1: What motivates internet users to produce content on the internet?

H1: The more internet users find content generation experiences online gratifying, the more they will participate in user-generated content activities.

Palmgreen and Rayburn (1979) argued that the primary task facing media research was to integrate the roles played by gratifications and other factors into a general theory of media consumption. To understand the relationship between the motives for internet content generation and the types and amount of content generated online, the concepts of civic engagement and psychological empowerment can be applied to describe how individuals who are active in civic matters might use the internet to express views, elevate awareness and engage in debates on important social issues, in a manner similar to writing opinion essays in newspapers and participating in phone-in talk shows. This media participation may subsequently affect psychological empowerment. However, few of the available published studies on psychological empowerment have examined civic engagement in relation to activities in user-generated internet content.

Psychological empowerment

Empowerment is a process through which people gain mastery or control over their lives, improve strengths and competences and develop proactive behaviors to manage their social affairs (Katz, 1984). Zimmerman et al. (1992) posited that empowerment is a multidimensional construct that may be applied to communities, organizations and individuals. Empowerment at the individual level can be called psychological empowerment, which includes

three dimensions. The desire for control dimension refers to the perceived intrapersonal capacity to lead and influence social and political systems (Menon, 1999; Zimmerman and Rappaport, 1988). It is a self-perception that includes motivation to exert control. Self-efficacy reflects the interactional dimension, belief or perception of the knowledge and interpersonal skills needed to master social and political systems. It includes knowledge about the availability of resources needed to achieve goals (see McCarthy and Zald, 1977) and the development of the decision-making and problem-solving skills necessary to actively engage with one's environment. The behavioral or perceived competence dimension links to action and influences social and political systems. It reflects role-mastery which, besides requiring the skillful accomplishment of one or more assigned tasks, also requires successful coping with non-routine, role-related situations. It includes participation in activities and community organizations such as political groups, neighborhood associations and church or religious groups, helping others to cope with problems in life and with contacting public officials.

One way to develop a sense of psychological empowerment is to become involved in decisions that affect community life, such as contributing ideas and opinions in a public sphere on social matters that are important to social policies (such as actively expressing opinions that raise public awareness and concerns). This means that through citizen participation, empowerment may emerge. At the same time, a lack of meaningful participation in social and public affairs can be disempowering. Disempowerment occurs when citizens and/or communities lose significant control over their affairs. Thus, we expect that:

H2a: People who are active participants in self-producing content on the internet tend to be more empowered psychologically.

H2b: The more that internet users find content generation experiences online gratifying, the more they will be psychologically empowered.

Civic engagement

There is strong theoretical and empirical support for the idea that psychological empowerment and civic engagement are linked (Chang, 2005; Zimmerman and Rappaport, 1988). Heller et al. defined civic engagement as 'a process in which individuals take part in decision making in the institutions, programs and environments that affect them' (1984: 339). They identified two major forms of civic engagement. In the broadest sense, this study treats civic engagement to include both behaviors and attitudes with respect to political and quasi-political processes and institutions (e.g. Jennings and Zeitner, 2003; Putnam, 2000). Individual difference constructs

such as media attentiveness, subjective assessment of internal and external political efficacy and interest in public affairs appear logically related to the broader construct of civic engagement with respect to citizens. For example, a behavioral measure on attention to traditional media such as radio, newspapers and television in order to follow public affairs, politics and the news certainly constitutes one obvious place to look for the consequences of mass media.

In assessing the attitudinal impacts of civic engagement, two subjective measures capture how internal and external political efficacy would make a difference in how people feel, think and act in political affairs. In terms of feeling and in general, a low sense of self-efficacy is associated with depression, anxiety and helplessness. People who suffer from these conditions also have low self-esteem and harbor pessimistic thoughts about their accomplishments and personal development. Applying these concepts in political contexts, external political efficacy refers to a global confidence in one's coping ability across a wide range of demanding political situations, while internal political efficacy refers to general self-efficacy, meaning a broad and stable sense of personal competence to deal effectively with a variety of stressful political downturns (Schwarzer, 1994). The last indicator for civic engagement deals with interest in public affairs. This indicator reflects an anticipated relationship between the interest in public affairs and the amount of participation in content creation online in expressing political views.

In this exploratory research, I seek to add more understanding of the dynamics involved to how the internet can be employed in generating content and how it affects psychological empowerment by analyzing a number of civic engagement indicators and their relationships. Hence, we expect that:

H3a: People who are highly engaged in civic matters tend to be more psychologically empowered.

H3b: There will be significant relationships between civic engagement indicators and the level of user-generated contents on the internet.

As a continuous variable, people's psychological empowerment should be viewed in varying degrees rather than as empowered or not empowered. Empowerment is not a global construct that can be generalized across different life situations and roles; rather, it is specific to different domains (Zimmerman, 1995). Grounded in these theoretical frameworks, this study examines how factors intrinsic to a person's orientation shaped by civic engagement, together with involvement in content creation online, would affect psychological empowerment. As a result, I ask the following two research questions:

RQ2: How can demographics, gratifications obtained and civic engagement predict participation in user-generated contents?

RQ3: How can demographics, gratifications obtained, civic engagement and participation in user-generated contents predict psychological empowerment?

METHOD

Data collection and sample

The data for this study were collected via a telephone survey with a probability sample of 798 internet users aged 14 to 70. The survey instrument was pilot tested before the actual fieldwork, which ran between 11 and 23 July 2007. The response rate was 78 percent with a total of 626 complete interviews. More than half of the sample (52.7 percent) were males, with sampling error equalling ± 2 percent at the .05 confidence level. The average age of the sample was 24.75 ($SD = 10.77$). More than 56.3 percent of all the respondents had a median monthly household income equal to US\$3,205–3,846. About 14.3 percent did not complete high school, 34 percent were high school graduates, 25.9 percent were associate degree holders and 25.8 percent were university graduates or above.

Measures

Gratifications of internet content generation Initially, relevant gratification items used in previous research into traditional and new media such as television (Rubin, 1983), personal computers (Lin, 1998), mobile phones (Leung and Wei, 2000) and the internet (Papacharissi and Rubin, 2000) and ICQ (Leung, 2001) were included in the survey questionnaire. Additional items were gathered through a focus group of 27 students to refine the unique motives associated with content generation on the internet. A pilot study on gratifications obtained in internet content generation consisting of 31 items was conducted on 53 respondents to eliminate bad items and solicit new ones. Items that were found ambiguous and repetitive were eliminated. The final questionnaire consisted of 23 gratification statements. A five-point Likert scale was used (where 1 = 'strongly disagree' and 5 = 'strongly agree').

Psychological empowerment General self-efficacy was measured using a five-item, short version of a scale developed by Tipton and Worthington (1984) including items such as 'I can remain calm when facing difficulties because I can rely on my coping abilities' and 'No matter what comes my way, I am usually able to handle it'. Perceived competence was measured using a four-item scale assessing skills particularly relevant to involvement in community organizations (Florin and Wandersmann, 1984). Sample items included 'I am often a leader in groups' and 'I can usually organize people to get things done.' In addition, a desire for control scale was used (Burger and Cooper, 1979), e.g. 'I enjoy

having control over my own destiny’ and ‘I prefer a job where I have a lot of control over what I do and when I do it’. Table 1 shows an exploratory factor analysis characterizing the three-factor structure of psychological empowerment with eigenvalues greater than 1.0 and reasonably acceptable reliability scores.

User-generated content The respondents were asked: ‘Over the past six months, how much time on a typical day do you spend on the following user-generated content activities on the internet: personal webpage, blogs, forums, posting videos on YouTube and contributing information on Wikipedia?’ The scale used was 1 = 15 minutes or fewer, 2 = 16–30 minutes, 3 = 31–59 minutes, 4 = 60–120 minutes and 5 = 121 minutes or more per day. As shown in Table 2, more than 73 percent of the respondents had

• Table 1 Factor analysis of psychological empowerment

	FACTORS			MEAN	SD
	1	2	3		
Self-efficacy:					
1. I can remain calm when facing difficulties because I can rely on my coping abilities.	.781			3.42	.85
2. No matter what comes my way, I am usually able to handle it.	.691			3.32	.77
3. I am confident that I could deal efficiently with unexpected events.	.674			3.26	.80
4. Thanks to my resourcefulness, I know how to handle unforeseen situations.	.595			3.22	.80
5. I consider myself to be generally more capable of handling situations than others.	.591			3.12	.77
Perceived competence:					
6. I am often a leader in groups.		.736		2.93	.97
7. I find it very hard to talk in front of a group. (R)		.684		3.42	1.08
8. I can usually organize people to get things done.		.636		3.32	.85
9. Other people usually follow my ideas.		.587		3.09	.76
Desire for control:					
10. I enjoy making my own decisions.			.693	3.63	.96
11. I prefer a job where I have a lot of control over what I do and when I do it.			.644	3.90	.93
12. I'd rather run my own business and make my own mistakes than listen to someone else's orders.			.616	2.64	1.05
13. If someone opposes me, I can find ways and means to get what I want.			.568	3.20	.90
14. What happens to me in the future mostly depends on me.			.426	3.99	.90
Eigenvalue	4.42	1.45	1.10		
Variance explained	31.60	10.37	7.86		
Cronbach's alpha	.77	.70	.60		

• Table 2 User-generated internet contents

USER-GENERATED CONTENTS	PERCENT PARTICIPATED	MINUTES PER DAY
1. Forum	73.8	2.42
2. Blogs	65.5	2.62
3. Wikipedia	38.1	2.43
4. Personal webpage	26.7	2.51
5. YouTube	20.8	2.29

created content in forums in the past six months, 65.5 percent on blogs, 38.7 percent on Wikipedia, 26.7 percent on personal webpages and about 21 percent had posted videos on YouTube. On the whole, the respondents spent approximately 16–30 minutes per day (median = 2) on these activities. These five activities were combined into a single measure for overall user-generated content online. Reliability alpha was .85.

Media attentiveness The respondents were asked how often in a typical week they used newspapers, magazines, radio news and TV news to follow public affairs and politics. Frequency categories ranged from 0 = not even one day, to 7 = seven days. A composite measure for media attentiveness was created by combining the four media sources.

External political efficacy Measurement was based on 0 = ‘agree’ and 1 = ‘disagree’ (efficacious) responses to statements. The respondents were asked: ‘I don’t think public officials care much about what people like me think’, and ‘People like me don’t have any say about what the government does’. A composite score was created and higher scores indicate greater external political efficacy. Reliability alpha was .85.

Internal political efficacy Measurement was based on 0 = ‘agree’ and 1 = ‘disagree’ (efficacious) answers. The respondents responded to two statements: ‘Voting is the only way that people like me can have any say about how the government runs things’ and ‘Sometimes politics and government seem so complicated that a person like me can’t really understand what’s going on’. Higher scores indicate greater internal political efficacy. Although this measure has a low level of reliability ($\alpha = .52$), I combined the two items into one measure in keeping with conventional practice in the literature.

Interest in public affairs This was measured based on answers to the following question: ‘Some people seem to think about what’s going on in government most of the time, whether there is an election going on or not; others aren’t that interested. Would you say you follow what’s going on in government most of the time (4), some of the time (3), only now and then (2) or hardly at all (1)?’

Demographics Personal data such as age, gender, education and monthly income were assessed and recorded.

FINDINGS

Motives for user-generated contents online

To explore what motivates internet users to produce content online, a principal components factor analysis with a Varimax rotation was run to determine the potential groupings of 23 items. Seven items with extremely low communalities and items that failed to load on any factors were removed. The analysis yielded four factors with an eigenvalue greater than 1.0 and explained 59.02 percent of the variance (see Table 3).

The first factor was ‘recognition needs’, which reflected how internet users engage in content generation online to establish their personal identity, gain respect, build confidence and publicize their expertise. The reliability of these

• Table 3 Gratifications user-generated content on the internet (N = 626)

	FACTORS				MEAN	SD
	1	2	3	4		
I participate in content-generation online:						
Recognition needs:						
1. To establish my personal identity	.773				2.34	1.03
2. To gain respect and support	.733				2.54	1.02
3. To build up my confidence	.729				2.40	1.02
4. because it is satisfying	.647				2.78	1.04
5. To promote or publicize my expertise	.622				2.44	1.11
Cognitive needs:						
6. To broaden my knowledge base		.765			3.28	1.13
7. To find out what is going on in society		.753			3.21	1.08
8. To understand events that are happening		.738			3.36	1.09
9. To refine my thinking	.424	.560			2.94	1.11
Social needs:						
10. To express my feeling			.775		3.34	1.12
11. To share my views, thoughts, and experience			.763		3.70	1.00
12. To let my family and friends know my recent situation			.730		3.73	.99
Entertainment needs:						
13. To pass time				.835	3.11	1.26
14. Because I am curious				.618	2.52	1.12
15. Because it is entertaining				.534	3.16	1.05
16. Because it is trendy	.413			.511	2.62	1.21
Eigenvalue	5.41	1.56	1.36	1.11		
Variance explained	33.84	9.73	8.52	6.93		
Cronbach’s alpha	.81	.75	.73	.67		

five items as indicated by Cronbach's alpha was high at .81. The second factor was 'cognitive needs' ($\alpha = .75$). It included four items stating that online content generation helps users to broaden their knowledge base, keep abreast with the latest developments and understand why things are happening in the community. The third factor was 'social needs'. It consisted of three items illustrating how internet users find the internet a comfortable place to reveal their feelings, share views and experiences and to let their family and friends know about their latest information. Cronbach's alpha was moderately high at .73. The fourth factor was 'entertainment needs' ($\alpha = .67$). It contained four items indicating that content generation online can be fun, entertaining, trendy and used to pass the time.

As a whole, these four factors were conceptually consistent with the theoretical expectations described by Nardi et al. (2004) and Papacharissi (2003). In sum, this study found that there is a deeply-held belief in the value of online content-generation. The respondents believed that through the content-generation online process, they would have the opportunity to be recognized, gain respect, publicize their expertise, learn more of the world, socialize with friends and be entertained. Internet users thrive on their immediate access to the world and it is indicative of their culture in getting experience of being both a producer and a consumer of media content.

Hypotheses testing

The results from the bivariate correlation in Table 4 show that the composite level of user-generated content on the internet is significantly linked to all four dimensions of the gratification of content generation, including satisfying users' recognition needs ($r = .19, p < .001$), cognitive needs ($r = .11, p < .01$), social needs ($r = .21, p < .001$) and entertainment needs ($r = .13, p < .01$). Specifically, regression analysis shows that recognition and social needs are two significant motivations for internet content generation. This indicates that the more that internet users are gratified by being recognized, understanding the world, helping them to socialize and being entertained through online content creation, the more internet content they will generate through personal webpages, blogs, forums, postings on YouTube and contributing information on Wikipedia. Moreover, additional regressions were run using individual content generation activities as dependent variables. The results show that people who enjoy recognition gratification tend to be more active in generating content in blogs, on YouTube and in posting on Wikipedia; whereas those who receive entertainment gratification in the process of generating internet content are those who enjoy participating in forums. Thus, H1 is largely supported.

• Table 4 Regression of demographics, gratifications of content generation, psychological empowerment, civic engagement and target audience on user-generated content (N = 626)

PREDICTORS	USER-GENERATED CONTENTS (COMPOSITE)	
	<i>r</i>	β
Demographics:		
Gender (male = 1)	-.08	-.07
Age	-.33***	-.25***
Education	-.15***	-.14**
Household monthly income	.03	.13**
Gratifications of content generation:		
Recognition needs	.19***	.15**
Cognitive needs	.11**	.02
Social needs	.21***	.14**
Entertainment needs	.13**	-.05
Civic engagement:		
Media attentiveness	.03	.03
External political efficacy	.06	.08*
Internal political efficacy	-.01	.00
Interest in public affairs	.02	.07
<i>R</i> ²		.15
Final adjusted <i>R</i> ²		.14

Figures are Pearson’s *r* and standardized beta-coefficients.

p* < .1; *p* < .05; ****p* < .01; *****p* < .001

As shown in Table 5, a significant relationship was found between the composite level of user-generated content online and psychological empowerment ($\beta = .09, p < .05$; especially the self-efficacy component with $\beta = .10, p < .01$). Therefore, H2a is supported. H2b hypothesized that the more that internet users find content generation experiences online gratifying, the more they will be psychologically empowered. The results in Table 5 show significant bivariate relationships between composite psychological empowerment and the recognition dimension ($r = .13, p < .01$), cognitive dimension ($r = .11, p < .01$) and social needs dimension ($r = .15, p < .001$) of the gratifications-obtained from online content generation. This indicates that the more that internet users’ recognition needs are gratified, the more they perceive that they are empowered with high self-efficacy and perceived competence. This is especially the case, that the more they feel that content generation online satisfies their social needs (i.e. ability to express feelings, views, thoughts and experiences on the internet), the more they feel that they have a lot of control over what they do and when they do it. Thus, H2b is largely supported.

• Table 5 Regression of demographics, gratifications of content generation, civic engagement and user-generated content on psychological empowerment ($N = 626$)

PREDICTORS	PSYCHOLOGICAL EMPOWERMENT (COMPOSITE)		COMPONENTS		
	r	β	SELF-EFFICACY	PERCEIVED COMPETENCE	DESIRE FOR CONTROL
Demographics:					
Gender (male = 1)	.05	.05	.05	.00	.08
Age	.13***	.01	.18***	.00	.02
Education	.17***	.04	.09*	-.01	.06
Household monthly income	.21***	.09*	.05	.15**	.04
Gratifications of content generation:					
Recognition needs	.13**	.07	.16**	.11*	-.04
Cognitive needs	.11**	.03	.03	-.00	.02
Social needs	.15***	.10*	.06	.09#	.13**
Entertainment needs	.04	-.01	-.02	-.02	.11*
Civic engagement:					
Media attentiveness	.15***	.02	.01	.03	.01
External political efficacy	.12**	.10*	.06	.07	.10**
Internal political efficacy	.14***	.11**	.14**	.07	.02
Interest in public affairs	.23***	.18***	.19***	.19***	.02
User-generated content (composite)	.09*	.09*	.10**	.05	.05
R^2		.16	.21	.12	.06
Final adjusted R^2		.14	.19	.10	.03

Figures are correlation and standardized beta coefficients.

$p < .1$; * $p < .05$; ** $p < .01$; *** $p < .001$

The correlational analyses in Table 5 also indicate that civic engagement, as revealed in media attentiveness ($r = .15$, $p < .001$), external political efficacy ($r = .12$, $p < .01$), internal political efficacy ($r = .14$, $p < .001$) and interest in public affairs ($r = .23$, $p < .001$) and the composite measure of psychological empowerment are significantly linked. This suggests that the more active people are in civic matters, the more they will be psychologically empowered. Thus, as expected, H3a is supported.

H3b predicted that there are significant relationships between civic engagement indicators and the level of user-generated content on the internet. Bivariate coefficients in Table 4 show that no significant relationship was found between various dimensions of civic engagement and user-generated content. This means that people who are actively participating in civic matters are not necessarily those who are active in generating content online. This may be due to the fact that to some people and to some extent, the internet may be, as Putnam (2000) put it, a depoliticizing medium such as

television and a causative agent in deflecting people from civic matters. Thus, H3b is not supported.

Predicting user-generated internet content

When the composite user-generated content is used as the dependent variable, recognition needs is a strong predictor of user-generated content – especially in blogs and postings on YouTube (as shown in Table 4). This was demonstrated in separate regression analyses when regressed on various internet content generation activities. Social needs was significantly linked also to user-generated content, particularly in forums. This means that through maintenance of their own blogs and commenting on others' blogs, internet users' names become recognized and their expertise is popularized, and through frequenting forums they are able to express views and feelings to friends and family. Although no bivariate relationship was found between the component of civic engagement and user-generated content activities, regression analysis shows that external political efficacy is significant in predicting the composite measure of internet content generation. This suggests that individuals with high external political efficacy (i.e. who think public officials care much about what people like them think and that they do have a say about what the government does) would spend more time online generating content either through forum, blogs or posting video content on YouTube to speak their mind.

Demographically, age, education and income are significant predictors, meaning that the younger and less educated the internet users are and the higher monthly income they have, the more active they would be in all forms of content generation activities.

Predicting psychological empowerment

The regression results in Table 5 indicate that civic engagement, as reflected by external political efficacy ($\beta = .10, p < .05$), internal political efficacy ($\beta = .11, p < .01$) and an interest in public affairs ($\beta = .18, p < .001$), is significantly associated with psychological empowerment. This indicates that individuals with a greater degree of civic engagement tend to enjoy a higher level of psychological empowerment. In particular, individuals who score high in an interest in public affairs tend to score high in the self-efficacy ($\beta = .19, p < .001$) and perceived competence ($\beta = .19, p < .001$) components of psychological empowerment. As expected, internal political efficacy is predictive of the self-efficacy dimension ($\beta = .14, p < .01$) of psychological empowerment. External political efficacy also significantly predicts the desire for control component ($\beta = .10, p < .01$) of psychological empowerment.

Although weak, user-generated content does have significant influence on psychological empowerment ($\beta = .09, p < .05$). The more actively that

individuals generate contents online, the more they are psychologically empowered, especially in self-efficacy ($\beta = .10, p < .01$).

Gratifications of internet content generation are significantly linked to psychological empowerment. The more recognition gratification ($\beta = .16, p < .01$ for self-efficacy and $\beta = .11, p < .05$ for perceived competence dimensions of psychological empowerment) that people obtained in generating content online and the more social gratification ($\beta = .13, p < .01$) that they enjoyed through online content generation to express feelings, views and thoughts to friends and family, the more they are confident that they can deal with unexpected events and have control over what they do.

Demographically, a higher monthly-household income, older age and better education are important predictors of psychological empowerment components.

DISCUSSION

Motives of content generation online

One of the major aims of this exploratory study was to identify the underlying structure of what motivates internet users to generate content online. An exploratory factor analysis successfully yielded four clearly identifiable factors which, by and large, confirm the characterization of the gratifications obtained from content creation among bloggers in previous research. This reinforces Trammell et al.'s (2004) qualitative study which described motivations for blogging as self-expression, social interaction, entertainment, passing the time, information and professional advancement, and supports the study by Nardi et al. (2004), which identified that bloggers document their lives, provide commentary and opinions, express deeply felt emotions, articulate ideas through writing and form and maintain community. There is strong support for our expectation that these motivations are powerful predictors associated with internet content generation. In particular, wanting to be recognized is the strongest motivation for reading, writing and commenting on other people's blogs and posting videos on YouTube; while being entertained moderately affects forum participation and information contribution on Wikipedia. At the social level, internet content producers value the diverse means to express and share their feelings, viewpoints and experiences. The interactive nature of the internet attracts these content creators because the responses and comments that they receive on their content encourage them to do more. This fuels the cycle of production and helps a cybercommunity with common interest to grow larger. Active internet content contributors tend to be young and less educated, but with a high monthly income. This may reflect the typical socioeconomic profile of internet users: young, with the financial means to

equip themselves with a high-end personal computer and broadband access. It is also interesting to note that no significant bivariate relationship was found between household monthly income and user-generated content. However, when I examined the relationship in a multivariate context, both age and income were significantly linked to content creation in the regression analysis. This may suggest that internet users with the same financial demographic but older may not exhibit the interest or know-how in contributing content on the internet. Content creators on the internet are generally young and financially capable individuals.

Civic engagement and content generation

Although no significant bivariate relationship was found, as hypothesized, between any dimension of civic engagement and the level of user-generated internet content, regression results do demonstrate a link, although weak, between external political efficacy and content creation online in the present study of a sample of internet users in Hong Kong – a British colony prior to 1997 and returned to China 11 years ago. The lack of significance in predicting the composite user-generated internet content by other dimensions of civic engagement may be the result of the immature and not fully formed democratic culture in the unique political situation in Hong Kong after 100 years of British rule. After the reunification, the political climate is rather polarized. Some internet users may refrain from generating publicly visible political content in blogs and forums that may make them vulnerable to criticism by others who holds different political views (Hayes et al., 2006). As a result, both political efficacies are still under-developed. However, the small but significant relationship between external political efficacy and user-generated content also implies that the attitudinal indicator for civic engagement does have an influence on behavior and vice versa. This may mean that the more confident internet users are with their coping ability across a wide range of difficult sociopolitical situations, the more they believe in the power and influence of content creation on the internet. With internet users becoming more used to interacting with media rather than passively consuming it, they believe that there are audiences for the content they produce. As Dovey and Kennedy argue that we as citizens of the 21st century, we should be ‘increasingly caught up in a network of technically and mechanically mediated relationships with others who share, to varying degrees, the same attitudes/tastes, pleasures and preferences’ (2006: 17). Furthermore, as the internet is increasingly embedded into the fabric of our daily lives, the findings of this study also supports David Tomas’s (2000) ‘technicity’ concept which describes how new kinds of social and cultural relationships are being formed through particular kinds of skills with particular kinds of technology. The notion of technicity may also be a valid

explanation to the significant relation between external political efficacy and content creation online as our identity and subjectivity are increasingly mediated through technology and the assumption that technology as an integral aspect of how we connect to the world (Dovey and Kennedy, 2006).

Content generation, civic engagement and psychological empowerment

Another goal of this exploratory research is to help advance the area of research in empowerment theory and intervention. Rappaport (1984) proposed the adoption of empowerment as a guiding principle for community psychology and argued for research at multiple levels and in different settings to advance our understanding of the process by which social and personal changes occur. A key finding of this study is that the process as well as the consequences of content creation online seems to have a significant effect, although small, on psychological empowerment.

A higher level of participation, such as generating internet content in personal webpages, blogs, forums, YouTube and Wikipedia, can serve as a catalyst for psychological empowerment or 'a participatory political life' (e.g. Gillmore, 2006: 100). That the highly involved individuals scored higher on the self-efficacy dimension than those less involved in content creation suggests that psychological empowerment is related to actual participation in the life of one's community. In fact, people with the knowledge and interpersonal skills to master social and political systems and the network to access resources may have a different personality, cognitive and motivational aspects of personal control and competence. While cause and effect cannot be determined from this research, it does suggest that if one is interested in identifying and studying empowered individuals, they may be found among those most actively participating in internet content creation.

Overall, as shown in Table 5, civic engagement indicators were better predicting variables on psychological empowerment than involvement in internet content creation, probably because the measure of involvement in generating content did not take into consideration the type of content in which the person was engaged. It is interesting to note that the attitudinal dimension of the civic engagement measure (especially both the external and internal political efficacy indicators together with interest in public affairs) contributes significantly to the regression function in the analysis of psychological empowerment. This confirms the idea in past research that psychological empowerment and civic engagement are linked (Katz and Rice, 2002; Price, 1990; Zimmerman and Rappaport, 1988). Furthermore, this study tested the theoretical connections between the three components of psychological empowerment (self-efficacy, perceived competence and desire for control) and the four indicators in civic engagement to advance

our knowledge of the empowerment construct. The findings suggest that those who are politically efficacious internally tend also to be self-efficacious and have the knowledge and interpersonal skills to master social and political systems, have access to resources needed to achieve goals, and possess the decision-making and problem-solving skills necessary to actively engage with their environment. Those who have great interest in public affairs seem also to perceive themselves as confident and competent and able to deal efficiently with unexpected events and problems: they know how to handle unforeseen situations and can remain calm when facing difficulties. This indicates that having the time and interest to think about what is going on in government tends to belong to those who are in a social position where they believe that they can influence the public and social decisions. However, media attentiveness was not able to sustain significant relationships with psychological empowerment in the regression models, despite the significant bivariate association with the composite measure. This finding does not support previous research that increases in exposure to informational media presentations, such as newspapers or national television news programs, correspond to increases in self-efficacy (Newhagen, 1994). This may be due to the fact that measure of media attentiveness in the present study was focused on political news, in which most young internet users in Hong Kong have less interest.

Turning to the relationship between the gratifications obtained in internet content generation and empowerment, this study found that obtaining gratification from being recognized and being able to articulate views, thoughts and experiences through content creation online are important determinants in affecting a person's perceived empowerment. As a whole, the four motivations correlated, mostly in the hypothesized manner, with the level of content creation and psychological empowerment.

The results of this exploratory study add to our knowledge and open up new avenues of thinking about the three-way connection among the rise of internet content generation, civic engagement and psychological empowerment. These constructs cover a wide array of theoretical and practical importance relevant to influencing the degree of online content generation.

CONCLUSION

Limitations of the study and recommendations for future research

Several limitations of the study should be recognized. First, this research is correlational and cross-sectional and thus only examines associations among constructs. It does not resolve the issue of whether involvement in content generation online enhances empowerment, or whether empowered

individuals choose to participate. Such design limits causal interpretation of the data but allows for the possibility of other plausible explorations. One alternative model might consider psychological empowerment as a criterion variable. Although most empowerment theorists posit that civic engagement precedes empowerment (Itzhaky and York, 2000; Zimmerman, 1990), others have argued that this relationship may be more reciprocal in nature. Future research should examine different indicators of civic engagement and multiple levels of analysis that may be unique antecedents or consequences of psychological empowerment. Future work should employ designs that provide longitudinal analysis and control for rival explanations to better infer causal relationships among the variables studied.

Second, what motivates users to create content online is a broad research question. A small qualitative focus group may not be sufficient to provide a comprehensive account of a well-grounded theoretical overview of all the motives for content creation online. Furthermore, not knowing exactly what content they produce when engaging in content production in blogs, personal webpages, forums and YouTube postings is a major shortcoming of this research. Content for personal webpages, personal blogs versus political blogs, types of forums read and commented on and the nature of videos posted on YouTube are all different forms of communication with very different intents and purposes. Therefore, it is impossible to know if people are using the web to produce content that would effect empowerment, and in turn have influence on awareness of community problems resulting in changing social policy. Future research will benefit if the types of content produced on the internet are assessed.

These limitations require careful consideration, particularly when the findings are generalized to other settings or populations. Future research also needs to go beyond the individual level of analysis in the study of empowerment to understand the organizational contexts that may help one to develop psychological empowerment in a corporate setting. This may be due to the fact that empowerment might be expected to develop more in organizations that encourage participation in decision-making. Research could examine individual differences across a variety of organizations.

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