The Effects of Gratifications on Intention to Read

Citizen Journalism News: The Mediating Effect of Attitude

Abstract

This paper investigates gratifications of reading citizen journalism news by applying the research model drawn from the uses and gratifications approach, and the cognition-affection-conation framework. Based on the uses and gratifications literature and the cognition-affection-conation framework, the effects of gratifications on attitude (i.e., affective) and intention (i.e., conative) are examined. The indirect effects of gratifications on intention to read news (i.e., conation) through the interpretation of affection that users experienced are also examined. Using a survey conducted across nearly 300 users, the results show that all gratifications, except for escape, have direct effects on attitude. However, none of the gratifications has a direct effect on intention. The proposed model shows that attitude mediates the path between the effects of all gratifications and intention. The model explains a high percentage of variance with gratifications explaining about 46 percent of the variance in attitude. However, their effects on intention are limited when attitude is controlled.

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1   Introduction

Web 2.0 is an open-source web application that enables users to share information, interact with other users, create, collaborate and exchange user-generated content. Due to large-scale community collaboration in creating contents through Web 2.0 applications (e.g., Wikipedia, YouTube and Facebook), Time magazine declared "You", contributors of the Web 2.0 applications, as the Person of the Year in 2006. Recent studies that examined new media in the form of Web 2.0 found that the effects of gratifications on outcome variables such as intention and use are *limited* (e.g., Leung, 2009; Luo, Chea, & Chen, 2011; Namkee Park, 2010; Namsu Park, Kee, & Valenzuela, 2009).

More specifically, Namsu Park et al. (2009) found three out of four gratifications of Facebook use to have effects on political participation, but none of these gratifications, however, has effects on usage (i.e., civic participation). In another study, Namkee Park (2010) showed that his model, which hypothesizes direct effects of gratifications on weekly use of VoIP phone service, does not represent a good fit between the set of hypotheses and the data. Yet another study examining the effects of gratifications of user-generated content on past usage showed that gratifications, such as media attentiveness, external and internal political efficacy, and interest in public affairs, have no effect on usage (Leung, 2009). Therefore, there is a need to examine the effects of gratifications conferred by these new media technologies on intention, especially as only very few studies, if any, have examined the indirect effects of gratifications on these outcome variables.

It is also important to examine whether a *mediator* can affect the relationship between the *gratifications* and these *outcome variables*. Among these variables, the mediating effect of attitude on the relationship between gratifications and intention promises great potential for advancing research on Web 2.0. Therefore, this study attempts to shed light on the black box that may affect the relationship between gratifications and intention to consume news which is based on the Web 2.0 technology, and to achieve this aim by applying the cognitive, affective, conative framework.

Motivated by opening the black box of the mediating variable between gratifications and intention, this study naturally contributes to the current literature by highlighting that gratifications can achieve higher outcomes (i.e., explanatory power) when a possible mediator is included and examined; and by stressing the importance of attitude as a mediator between gratifications and intention. The purpose of this paper is to examine whether gratifications should be conceptualized as having direct effects on intention. Specifically, we apply the uses and gratifications (U&G) perspective and investigate whether the five gratifications – generally used to examine news from traditional media such as television (TV) and newspaper – have direct influences on intention to read citizen journalism news. Based on the cognitive, affective and conative framework, this paper further hypothesizes that affection (i.e., attitude) fully mediates the relationship between the five gratifications (cognition) and intention to read citizen journalism news (conation). The findings not only confirm our hypotheses, but also contribute to a better understanding of the antecedents and consequences of both intention and gratifications. Several practical contributions are also highlighted in the discussion section.

2   Background

In addition to offering a platform for YouTube to share video contents, and for Wikipedia to create and share information, Web 2.0 also provides a platform for many ordinary citizens, who are not formally trained, to serve as journalists (Bowman & Willis, 2003; Figueiredo, Prado, Camara, & Albuquerque, 2009; Gillmor, 2004; Moeller, 2009). This transformation is known as News 2.0, Journalism 2.0 or Citizen Journalism (we use Citizen Journalism hereafter) and is manifested in the form of blogs, forums, and publications (such as Tianya, Xujinglei, Gaia, and My Missourian). Citizen journalism became prominent especially in the aftermath of cataclysmic events, such as the "9/11" attacks and the South-East Asian tsunami in 2004, when eyewitness accounts in the form of photographs and videos began proliferating on the Internet (Leung, 2009).

With the growing popularity of citizen journalism, Singapore has accordingly introduced STOMP (Straits Times Online Mobile Print), which is a citizen journalism website owned by Singapore Press Holdings (SPH), the country's major newspaper publisher. Singapore is often criticized for its authoritarian and overregulated media system (Chia, Yong, Wong, & Koh, 2007). In the case of STOMP, site contributors must register before they can submit their posts. In addition, before submissions are published online, the SPH staff – who act as gatekeepers – will ensure that the posts do not violate Singapore's law on libel and defamation, especially those relating to ethnic and religious concerns.

For the purpose of our study, we use STOMP which is based on Web 2.0 technology to examine our hypotheses.

3   Literature Review and Hypotheses

The uses and gratifications perspective assumes that media use derives from a conscious effort to fulfill specific social or psychological needs (R. B. Rubin, 2009). Previous research on

the uses and gratifications of computer-supported communication technologies suggests a broad range of gratifications, such as companionship, communication medium appeal, education, entertainment, escape, fashion, information seeking, personal identity, reassurance, surveillance, and social interaction (Ebersole, 2000; Ferguson & Perse, 2000; Leung, 2009; Lin, 1996; Nie & Erbring, 2000).

These studies showed that entertainment, pastime, relaxation, escape, surveillance and social information are the most common gratifications used to examine media (Ferguson & Perse, 2000; Lin, 1996). Relative to traditional media like television, the Internet, with its specific interactive features such as control over content and communication tools, serves to gratify consumers' needs differently (Nie & Erbring, 2000). For instance, gathering information through the Internet's search engines satisfies surveillance needs better than television (Nie & Erbring, 2000). Furthermore, new media like user-generated content technologies and citizen journalism sites can "fulfill both interpersonal needs of expression, inclusion, and social interaction and mediated needs of surveillance and information seeking, entertainment, and pastime or habit"; hence "a combination of motives should be employed to understand what needs blogging caters to" (Papacharissi, 2008, p. 145). Therefore, gratifications such as entertainment, pastime, relaxation/escape, surveillance and social information are still valid and important in examining the needs of citizen journalism readers.

Varying dimensions of gratifications were examined across U&G studies. Some studies combined several dimensions into a single construct (e.g., Ancu & Cozma, 2009), while others grouped both entertainment and pastime as one (e.g., Leung, 2009). For instance, at the operational level, two items, "when I am bored" and "when I have nothing better to do", are both included under the entertainment construct (Ancu & Cozma, 2009). In another example, Leung's

(2001) definition of relaxation consists of "getting away from pressures and responsibilities (p.491)", which is a form of escapism. In addition, Kaye and Johnson (2002) previously placed relaxation under the gratification construct of entertainment. To be consistent with previous studies in news media that include TV and newspaper (Beaudoin & Thorson, 2004; Eveland, 2001; A. M. Rubin, 1983), this study examines five gratifications: pastime, entertainment, relaxation, escape and surveillance motives for local news. It also attempts to explore if certain items or variables actually measure different constructs.

3.1   Gratifications of Reading Citizen Journalism News

Drawing from A.M. Rubin's (1983) U&G study, which was replicated in the context of the Internet by Papacharissi and Rubin (2000), as well as in studies by M. E. Kang and Atkin (1999), Lin (1996, 2002), and Ferguson and Perse (2000), this study also posits that *gratifications of reading citizen journalism will have positive effects on behavioral intention*. These theoretical links have been established by previous studies that examined the effects of media gratifications (i.e., motivations) on behavior, usage, web activity or behavioral intentions like Internet usage, radio listening, and television viewing (e.g., Ferguson & Perse, 2000; M. E. Kang & Atkin, 1999; Lin, 1996, 2002; Papacharissi & Rubin, 2000). Based on these prior studies, this paper also expects gratifications of relaxation, escape, pastime, entertainment, and surveillance motives for local news to have direct effects on intention to read citizen journalism news. Next, we elaborate on these assumptions.

Pastime. Pastime predicts self-presentation, design elements, and readership expectations. Past U&G research relates this dimension to media activity when one is idling; which allows one's time to be occupied; and which prevents boredom (Papacharissi & Rubin, 2000). While citizen journalism may include content pertaining to current affairs, it is not limited to news of

such nature. Novel encounters or interesting observations in one's daily life occupy much space

at online citizen journalism sites like STOMP. This distinctive feature, relative to traditional

news reporting, confers on the consumption of citizen journalism the potential to serve as a

leisure activity for passing time and averting boredom. Hence, in line with previous studies (e.g.,

Ferguson & Perse, 2000; M. E. Kang & Atkin, 1999; Lin, 1996, 2002; Papacharissi & Rubin,

2000), this paper expects that the gratification of "pastime" will have a direct effect on intention

to read citizen journalism news.

Entertainment. Entertainment is the extent to which the media posted on the Internet is

enjoyable and entertaining to users (Eighmey & McCord, 1998). U&G research has shown that

media entertainment is important in fulfilling users' needs for visual satisfaction, pleasure-

seeking activities, and emotional release (McQuail, 2010). In some studies, the construct

includes trendy behaviors and curious users (e.g., Leung, 2001). As citizen journalism may

deviate slightly from the formal news reporting style, interesting photographs coupled with

personal commentaries renders the content more engaging, and this increases its entertainment

value. Consistent with the aforementioned studies, this paper predicts that entertainment will

have a direct effect on intention to read citizen journalism news.

Relaxation. Relaxation refers to the occasion to unwind and have a pleasant break by

releasing tension. Leung (2001) found that the use of the Internet might enable one to be less

tense. Similarly, this paper proposes relaxation to have a positive effect on intention to read

citizen journalism news.

Escapism. Escapism relates to the idea of forgetting. It allows one to get away from what

one is doing; to put off something one should be doing, and to escape from routine as well as to

forget one's problems (Leung, 2001; Ruggiero, 2000). For instance, watching television is a sign

of desire for televised excitement (A. M. Rubin, 1983). Likewise, the gratification of escapism

offered by reading citizen journalism news may induce intention to read it.

Surveillance motives for local news. Surveillance motives for local news refers to keeping

up with local issues and seeking specific information (Kaye & Johnson, 2002). The gratification

sought in surveillance is based on the perspective of the audience as media consumers who

obtain local news from citizen journalism sites. This enables media consumers to understand

what is happening locally, to keep updated with political events, and to help them in assessing

political leaders (Beaudoin & Thorson, 2004; Eveland, 2001). It also provides food for thought

and reflection, thereby offering more facts to justify readers' opinions and to help them decide on

various issues (Eveland, 2001). In the same vein, this study expects that surveillance motives for

local news will positively influence intention to read citizen journalism news.

Thus we hypothesize:

H1: Gratifications will have positive effects on *intention* to read citizen journalism news.

3.2   Cognitive, Affective and Conative Framework

The cognitive-affective-conative framework (CAC) (Fishbein & Ajzen, 1975) has been

applied to many studies in the field of communications (e.g., Chia, 2006; Finnegan & Viswanath,

2002; Henning & Vorderer, 2001; Kalyanaraman & Sundar, 2006; Y. Kang & Kim, 2009; Kim

& Hunter, 1993; Luther, 2009; Namkee Park, 2010; Viswanath & Emmons, 2006). Cognition is

defined as "knowledge, opinions, thoughts, perceptions and beliefs about the object" (Fishbein &

Ajzen, 1975, pp. 11-12); while affection is "a person's feeling toward some objects, persons,

issues or events" (Fishbein & Ajzen, 1975, pp. 11-12); and conation is defined as "the part of

mental life having to do with striving, including desire and volition"(Flexner & Houck, 1987, p.

422).

In the CAC framework, cognition is a set of perceptions, evaluations, or beliefs which has a direct effect on affective outcomes such as attitude or satisfaction (Beaudry & Pinsonneault, 2010; Bhattacherjee, 2001; Spears & Barki, 2010). The emotional interpretation of these perceptions, evaluation or beliefs (i.e., affection) subsequently influences conation – the intentional component of motivation – that drives a person to implement the behavior (i.e., cognition→ affection → conation).

Many social–psychological theories, based on the attitude–behavior relationship, such as the theory of reasoned action (TRA)) (Fishbein & Ajzen, 1975), the theory of planned behavior (TPB) (Ajzen, 1991), and the technology acceptance model (TAM) (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989) apply the CAC framework into their theories. For instance, the TAM posits that perceived usefulness (PU) and perceived ease of use (PEOU) have an effect on attitude. PU is defined as the degree to which users believe that an application could enhance their performance while PEOU refers to the degree to which users believe that an application would be free from effort. PU and PEOU are two cognitive beliefs (i.e., cognition) that directly affect their attitude (i.e., affection) towards the application. Attitude subsequently has an effect on their intention (i.e., conation).

The TRA and the TPB are also based on the CAC framework (Ajzen, 1991; Fishbein & Ajzen, 1975). The central constructs in the TRA and the TPB are attitude, subjective norm, intention, and behavior. In the TPB, perceived behavior control (PBC) is also included in this theory because the TRA is unable to fully explain behavior that is not entirely under volitional control (Ajzen, 1991). Both the TRA and the TPB posit that behavior is under volitional control and is influenced by individuals' intention to perform a behavior. Intention (i.e., conation), in turn, is influenced by their attitude (i.e., affection), their feeling about whether others who are

important to them think they should perform the behavior (i.e., subjective norm), and their

feeling of whether it is easy or difficult to perform the respective behavior (only in the TPB; i.e.,

PBC). Attitude, subjective norm, and PBC are the products of certain beliefs and evaluations (i.e.,

cognition). For instance, a person who believes that performing a certain behavior (i.e., cognition)

will lead to positive consequences, will hold a favorable attitude toward the behavior (i.e.,

affective). That is to say, attitude (i.e., affective) is a function of the sum of one's salient

behavioral beliefs concerning the outcome of the action, each of which is weighted by one's

evaluation of the outcome (i.e., cognition). Similarly, a subjective norm is a function of one's

salient normative beliefs with respect to someone important to one's expectation to perform or

not to perform the behavior, and the judgment on whether one wants to comply (i.e., cognition).

In summary, the central theme in the TRA and TPB is that intention or willingness to perform a

behavior (i.e., conative) is influenced by one's attitude towards the behavior (i.e., affection). A

positive attitude towards the behavior is shaped by one's beliefs and evaluations about

performing the behavior (cognitive) (i.e., cognition→ affection → conation).

Similar to the TRA, TPB and TAM, U&G studies also apply the CAC framework.

Previous studies examining computer-mediated technologies have posited that beliefs and

evaluations (i.e., cognition) about the use of technology will have effects on attitude toward the

technology (i.e., affective), and attitude subsequently influences the intention to use (conation)

the technology (Y. Kang & Kim, 2009; Namkee Park, 2010). For instance, in a study which

examined the adoption of computer-based voice, self-efficacy, perceived quality, cost-

effectiveness, and three other gratifications and motivations (i.e., *cognition*) were hypothesized

to have effects on expected usefulness and ease of use which in turn influences the usage

(Namkee Park, 2010). In another study, Y. Kang and Kim (2009) looked at the adoption of the

4G network and predicted four types of perceived risks (i.e., cognition) to have an effect on resistance (a negative attitude /*affection* explaining why users do not want to use the technology), which subsequently influences participation intention (*conative*). Similar to these studies, this paper posits that gratifications will also have direct effects on attitude, which in turn will have a direct effect on intention. We elaborate on the relationships in the following section.

3.3   Gratifications and Attitude

Media gratifications are cognitive factors that influence media usage. The theoretical rationale for this has been provided by previous research, which applied the social cognitive theory to study the relationship between cognitive media gratifications and media usage (LaRose & Eastin, 2004; Papacharissi & Rubin, 2000; Stafford & Stafford, 2001). H1 explores these relationships. In addition, *cognition* is a set of perceptions, evaluations, or beliefs which has a direct effect on affection, "a person's feeling toward some objects, persons, issues or events", in the CAC framework (Fishbein & Ajzen, 1975, pp. 11-12). In other words, this set of perceptions, evaluations or beliefs needs to be *processed and interpreted with an emotional response*. Subsequently, the emotional interpretation of these perceptions and beliefs forms affection (i.e., cognition→ affection).

As attitudinal research describes attitude as affective (a positive or negative feeling) (Fishbein & Ajzen, 1975, p.12), it is influenced directly by a cognitive state of mind (e.g., beliefs, evaluations, and motivations). Consistent with the CAC framework, this paper hypothesizes that gratifications not only have direct effects on behavioral intention *(H1)*, but also have direct effects on affective attitude. Therefore, we hypothesize:

H2: Gratifications will have positive effects on *attitude* towards reading citizen journalism news.

3.4   The CAC framework: Affective Attitude and Conative Intention

In the CAC framework, affection (i.e., the emotional interpretation of the perceptions, evaluations or beliefs) has a direct influence on conation -- the intentional component of motivation that drives a person to implement the behavior (i.e., affection → conation). The relationship between attitude (i.e., affection) and intention to use a particular technology (i.e., conation) has received much empirical support in the context of technology adoption (Mathieson, 1991; Pavlou & Fygenson, 2006; Taylor & Todd, 1995; Venkatesh, Morris, Davis, & Davis, 2003). It is expected that the relationship between attitude and intention will also be present in the context of citizen journalism news. Specifically, a positive attitude towards citizen journalism news will have an influence on intention to read citizen journalism. Therefore, we hypothesize:

H3: Attitude will have a direct effect on intention to read citizen journalism news.

3.5   The Mediating Effect of Attitude

Recent studies on computer-supported communication technologies have hypothesized that gratifications directly affect the use of technology (e.g., Chen, 2011; Luo et al., 2011; Namkee Park, 2010; Namsu Park et al., 2009; Shin, 2011). For instance, Luo et al. (2009) used five gratification constructs (i.e., interpersonal utility, convenience, pastime, entertainment and information seeking) to predict the consumption of online newspapers. Chen (2001) hypothesized that the usage frequency of Twitter functions mediates the relationship between active time on Twitter and the gratification of fulfilling the need to connect with others. Shin (2011) predicted that the gratification derived from reading an e-book has a positive effect on intention to use. Leung (2009) on the other hand, examined the effects of gratifications of user-generated content on past usage. Namkee Park (2010), however, found that the model that predicts gratifications as having direct effects on usage, produced a poor model fit and many

non-significant paths. In his revised model, usefulness is hypothesized to fully mediate the effects of gratifications on usage, and this improves model fit significantly. Therefore, this study will focus on understanding how the citizen journalism site has been used, and to identify social and psychological dispositions that influence the gratifications, specifically in terms of how "dispositions combined connect to patterns of use and other behaviors and attitudes, or cognition" (Papacharissi, 2008, p. 145). In particular, this study will explore the mediating effect of attitude on the cognitive-conative linkages (i.e., on the gratifications-intention linkages). Accordingly, our last hypothesis explores this relationship.

Thus we hypothesize:

H4: Attitude will mediate the effects of gratifications on intention to read citizen journalism news.

4   Methods

4.1   Sample

A cross-sectional field survey was conducted to test our research hypotheses. The sample comprised undergraduate students from one of the largest universities in Asia. An email invitation seeking subjects who have visited the citizen journalism site (STOMP) was sent to all students in the university. They were invited to participate in a pen and paper survey. Of the students who expressed interest in participating, 500 were randomly recruited, with an equal mix of males and females. Respondents were compensated approximately US$7 for their participation. Ultimately, over 300 respondents participated, and 291 of their responses were found to be usable. The respondents came from different disciplines: about 22 percent of the students were from arts and social sciences (64 students), 28 percent from engineering (80 students), 26 percent from science (77 students), and another 24 percent from business (70

students). Of these, 143 students were females (51 percent) while 148 were males (49 percent).

Their average age was 21, with ages ranging from 17 to 25.

4.2   Survey Instrument

Most items used in the survey were adopted from previous research. Seven point Likert

scales (except for that of attitude) were used, ranging from strongly disagree (1) to strongly agree

(7). The two significant predictors of intention in the TPB, subjective norms and perceived

behavioral control, were treated as control variables for the following reasons: first, more

intention-based studies have been conducted using the theory of planned behavior (TPB) than the

technology acceptance model; second, it is important to control these variables because the

primary interest of this study is to examine the mediating effect of attitude on the relationship

between gratifications and intention (Ajzen, 1991; Armitage & Conner, 2001; Mathieson, 1991;

Pavlou & Fygenson, 2006). The five gratifications were pastime, entertainment, relaxation,

escape, and surveillance motives for local news (Beaudoin & Thorson, 2004; Eveland, 2001; A.

M. Rubin, 1983). For entertainment, three items were listed as follows: "reading the citizen

journalism news 1) entertains me, 2) is enjoyable, and 3) amuses me" ($M = 4.94$; $SD = 1.12$). The

scale items demonstrated an alpha, $\alpha = .90$ level of reliability. Items pertaining to relaxation

included "reading online news 1) relaxes me, 2) allows me to unwind, and 3) is a pleasant rest"

($M = 4.55$; $SD = 1.28$; $\alpha = .85$). Surveillance was measured with four items: "1) allows me to

keep up with the local news, 2) enables me to understand what is going on in the local

community, 3) gives me facts about the local community, and 4) lets me stay in touch with the

local community" ($M = 4.80$; $SD = 1.32$; $\alpha = .95$). The three items for pastime were listed as: "1)

when I have nothing better to do, 2) because it enables me to pass the time when I am bored, and

3) because it gives me something to do to occupy my time" ($M = 4.61$; $SD = 1.49$; $\alpha = .92$).

Lastly, items for escape were listed thus: "1) forget about school or other things, 2) get away from the rest of the family or others, and 3) get away from what I am doing" (M = 4.06; SD = 1.37; α = .94).

Items relating to the cognitive-affective-conative framework and the theory of planned behavior were drawn from the study of Fishbein & Ajzen (1975). The four attitude items used were bad /good idea, foolish /wise idea, unfavorable /favorable, and negative /positive (M = 4.52; SD = 1.28; α = .88). Behavior intention to read citizen journalism news was measured using two items (i.e., "I intend and I plan to read the news from this site") (M = 4.36; SD = 1.63; α = .98). Subjective norm items included: "1) a large percentage of my friends read citizen journalism news; 2) many of my friends read citizen journalism news; 3) and of the friends whom I know, many read citizen journalism news" (M = 4.94; SD = 1.12; α = .90). Perceived behavioral control items comprised: "1) I have control over the citizen journalism site; 2) Using the citizen journalism website is up to me; and 3) I have the knowledge and skills to use the citizen journalism site" (M = 4.94; SD = 1.12; α = .90).

5   Data Analyses and Results

The data was analyzed using the statistical package for the social sciences (SPSS) and the linear structural relations (LISREL) software. LISREL is a structural equation modeling technique that is suitable for testing models posited a priori and which contains measurement errors and reciprocal causation. It can also evaluate the reliability and validity of the measures, as well as assess the measurement and structural model within multi-item constructs simultaneously. Following the two-step procedure of Anderson and Gerbing (1991), this paper examines (i) the measurement model, which measured convergent and discriminant validity; and subsequently (ii) the structural model, which assessed the strength and direction of the relationships. For the

measurement model, convergent validity was assessed by examining the reliability of the construct. The discriminant validity was assessed by 1) factor analysis, 2) comparing the χ^2 of the CFA with nine latent variables against other CFAs with eight different latent variables, 3) the average variance extracted (AVE) values (>.50), and 4) the square root of the AVE value of each construct, which should be greater than its correlations with the other constructs. Additionally, seven fit indices were examined to evaluate the adequacy of the research model: the ratio of chi-square value to degrees of freedom < 3; the root mean square of approximation (RMSEA) < .08; the standardized root mean square residual (SRMS) < .05; the comparative fit index (CFI) > .93; incremental fit index (IFI) > .90; the normed fit index (NFI) > .90; and the Tucker-Lewis Index (TLI) > .95.

5.1   Measurement Model

The reliability for all constructs was high, ranging from 0.83 to 0.98 (see Table 1). These numbers were higher than the acceptable 0.707 threshold for field research (Cronbach, 1951; Cronbach & Meehl, 1955; Hair, Anderson, Tatham, & Black, 1998). In addition, convergent and discriminant validity were adequate. Specifically, factor analysis generated nine constructs and showed item loadings on each construct to be much higher than loadings on others (see Table 1). Moreover, comparison between the χ^2 of the original CFA with its nine latent variables against other CFAs with eight latent variables showed that the χ^2 of the original CFA was significantly better than any possible union of two latent variables. In addition, the AVE values were above .50 (see Table 2). Lastly, the square root of the AVE value of each construct was greater than its correlations with the other constructs (see Table 2). The results shown in Table 1 and Table 2 demonstrated that the psychometric properties of the measures used in the survey had

high reliability and validity, i.e., specifically, the composite reliability of all measures was higher than .83, and the measures had adequate convergent and discriminant validity.

5.2   Structural Model

Figure 1 shows the results of the structural model. The seven fit indexes were within accepted thresholds of χ^2 to the degrees of freedom ratio, with the ratio standing at 1:1.46 ($\chi^2_{316} =$ 460), SRMR=.04, CFI=.99, IFI=.99, NFI=.98, TLI=.99 and RMSEA=.04. Figure 1 also shows the relevant path coefficients and R-squares for attitude and intention. R-squares for attitude and intention were 52 percent and 48 percent, respectively. None of the gratifications had a direct effect on intention. The highest t-value was 1.69 (from pastime to intention), but was still not significant ($p > .05$). Therefore, H1 was not supported. The gratifications explained about 52 percent of the variance in attitude. Specifically, all gratifications, except for escape ($p > .05$), had direct effects on attitude. The standardized coefficient (β) of pastime was -.18 ($p < .01$); entertainment was .40 ($p < .01$); relaxation was .24 ($p < .01$); surveillance motive for local news was .29 ($p < .01$). Therefore, H2 was partially supported. Attitude had a strong effect on intention ($\beta = .64$; $p < .01$), therefore H3 was fully supported. Perceived behavioral control did not have any significant effect on intention to read citizen journalism news ($\beta = .04$; $p > .05$), but subjective norms ($\beta = .27$; $p < .01$) had a significant effect on intention; the two constructs (attitude and subjective norm) in the theory of planned behavior explained 48 percent of the variance in intention. To test the mediation effect (i.e., H4), we first conducted a quick run-through of the results using Baron and Kenny's (1986) method in four steps. An additional analysis using bootstrapping will be further examined in the discussion section. In the first step, we used intention as the dependent variable in a regression equation and gratifications as predictors. The results showed there are effects that may be mediated. Specifically, three

gratifications, except escape and pastime, explained about 42 percent of the variance in intention. In the second step, we treated the mediator (i.e., attitude) as the dependent variable and gratifications as predictors. The results were significant; four gratifications (except only escape) explained over 50 percent of the variance in attitude. In the third step, we used intention as the dependent variable in a regression equation and the mediator, attitude, as the predictor. The results confirmed that attitude has a strong effect on intention. In the last step, as shown in Figure 1, the effects of three gratifications on intention (c.f. the first step) after controlling for the mediator (c-prime path) were all not significant, showing a complete mediation by attitude.

6   Discussion

The purpose of this study is to examine the relationships among gratifications, attitude and intention to read citizen journalism news. Specifically, five gratifications including pastime, entertainment, relaxation, escape and surveillance motives for local news are examined on their potential positive associations with the intentional component of motivations, which drive a person to implement the behavior (i.e., reading citizen journalism news). Furthermore, the effects of pastime, entertainment, relaxation, escape and surveillance motives for local news on intention are hypothesized to be mediated by attitude. Next, we discuss some interesting findings of the results.

First, the results in Figure 1 show that H1 is not supported, as none of the gratifications has a direct effect on intention. Second, the results also show that H2 is partially supported. Specifically, all four gratifications, except for escape, have significant effects on attitude. Escape does not affect attitude nor intention to read citizen journalism news. A recent study shows that reading blogs and visiting social networking sites may allow readers to escape from their own lives (Shao, 2009); however, unlike reading blogs and visiting social networking sites, subjects

may not perceive that reading citizen journalism news is a means of helping them to escape from their own lives. In addition, pastime is found to negatively impact attitude, but has no influence on intention. It appears that the gratification of pastime does not induce liking for citizen journalism news among subjects. Instead, a favorable attitude towards reading citizen journalism news stems from such gratifications as relaxation, understanding of local news, and entertainment value. Among the four gratifications, surveillance motives for local news and entertainment have the strongest effects on attitude. A previous study has shown that citizen journalism sites provide more local news than traditional newspapers or television (Singer, 2001). In the same vein, subjects in the present research are likely to perceive reading citizen journalism news as helpful in building knowledge of their immediate surroundings, and contributing to a positive attitude towards the activity. Consistent with previous studies (Leung, 2009; Luo et al., 2011; Namkee Park, 2010), entertainment, which is an intrinsic motivation in U&G, consistently explains a substantial variability in the affective and conative elements of new media technologies that include reading citizen journalism news, online news, and generating contents.

The results also support H3, observed in the strong positive effect of attitude on intention. This shows that the cognitive-affective-conative framework is still valid for predicting the use of Web 2.0 technologies, specifically those enabling citizen journalism in the case of this study. To examine H4 - whether attitude mediates the relationship between gratifications (comprising multiple independent variables of surveillance, pastime, escape, entertainment, relaxation) and intention (i.e., the dependent variable) - an additional analysis, which excludes the effects of control variables, was conducted. To test indirect effects in multiple independent variables models, a nonparametric resampling procedure called bootstrapping was applied (Preacher & Hayes, 2008). The bootstrapping method does not impose the assumption of normality of the

sampling distribution, and it calculates percentile-based confidence intervals based on sampling. Table 3 shows that attitude is a statistically significant mediator, as the 95% bias-corrected confidence intervals of the multiple independent variables and the dependent variable did not contain a zero value, except for escape which was not a significant predictor of attitude and intention. As results in the c-prime path (i.e., the direct effects of the IVs on the DV after controlling for the mediator) were not significant, attitude is found to mediate the relationships between all gratifications and intention. Therefore, H4 is supported.

Furthermore, the factor analysis verifies that entertainment and pastime could still be treated as two separate constructs. In past literature, entertainment and pastime are grouped as one dimension (i.e., entertainment construct). Specifically, at the operational level, some studies include two items, "when I am bored" and "when I have nothing better to do", in the entertainment construct (e.g., Ancu & Cozma, 2009; Leung, 2009). It may be prudent to revisit these constructs in future studies.

6.1   Implications for Theory

The findings from this study contribute to research in several ways. The primary contribution of this study is to highlight the need to reexamine the direct effects of gratifications on behavior and intention. The empirical results show that none of the gratifications has an effect on intention. Similar studies that examined new media in the form of Web 2.0 and other latest communication technologies also seem to indicate that these effects are limited. In particular, Luo et al. (2010) found that three out of five gratifications have direct effects on intention to read online news. The highest t-value (information seeking) was under 3.00, which is not highly significant statistically. The r-square for past usage, without adding any control variables, was 36 percent (cf. Namkee Park, 2010). In addition, Namsu Park et al. (2009) found three out of four

gratifications of Facebook use have effects on political participation, but none of these

gratifications has effects on usage (i.e.,. civic participation). The r-squares for political

participation and civic participation after controlling for hometown, year in school and parents'

education were 12 percent and 16 percent respectively. Moreover, Leung (2009) reported that

two out of four content generation gratifications have direct effects on use (i.e., past use) of user-

generated content activities and only one out of four civic engagement gratifications has direct

effects on past use, with an r-square value of less than 16 percent after controlling for

demographics. More recently, Namkee Park (2010) showed that the model, which hypothesizes

the direct effects of gratifications on weekly use of the VoIP phone service, does not represent a

good fit to the data. The paths from gratifications to the use of the technologies were mostly

insignificant. The fit indices improved dramatically only after revision of the model to exclude

the paths from gratifications to use, and the application of the usefulness and ease of use as the

mediators between gratifications and use. His revised model showed that all gratifications have

effects on the mediators. In particular, gratifications accounted for more than 40 to 53 percent of

the variance in the mediators (i.e., ease of use and usefulness respectively). Park's results show

that the hypothesizing of gratifications to have indirect effects on use, coupled with the inclusion

of another variable as the mediator between gratifications and use, may better explain the use and

enhance the model fit.

This study, which applies the cognition-affection-conation framework, also advances the

U&G approach by highlighting that cognitive gratifications can explain affective elements like

attitude better than conative elements such as intention to use. Specifically, the results in this

study show that four cognitive gratifications, except for escape, have effects on the affective

element, attitude (i.e., the mediator) with an r-square of 52 percent. The r-square value is similar

to that reported by Namkee Park (2010) after the original model was revised. This shows that a

significant improvement can be obtained if cognitive gratifications are hypothesized to have

direct effects on affective elements, instead of having effects on conative elements (an increase

of at least 10 percent). Previous studies merely reported r-squares ranging from 12 to 36 percent

when cognitive gratifications were hypothesized to have direct effects on conative elements (e.g.,

Leung, 2009; Luo et al., 2011).

Lastly, this study also calls for more studies to examine the effects of cognitive

gratifications on different elements of the CAC framework. Past studies that hypothesized the

effects of cognitive gratifications on conative elements may be further explored by reanalyzing

and publishing new reports, with additional analyses of the mediating effects. Future research

applying the U&G approach may also include mediating variables in the study. As proposed by

Papacharissi (2008), it is important to understand how new technologies could be used, and to

identify "social and psychological dispositions that influence the gratifications and dispositions

combined connect to patterns of use and *other behaviors and attitudes, or cognition*". (p. 145)

7   Conclusion

In summary, the study shows that user attitude towards reading citizen journalism news is

influenced by surveillance motives for local knowledge, relaxation, and entertainment. Unlike

television and other traditional media, our results show that escape does not have any effect on

attitude and intention, while pastime surprisingly has a negative effect on attitude. Most

importantly, our results also show that attitude fully mediates the effects of gratifications on

intention.

Table 1

Factor Analysis

Rotated Component Matrix(a)

	Component								
	1	2	3	4	5	6	7	8	9
Reliability (Alpha)	.95	.92	.94	.90	.85	.88	.98	.97	.83
Surveillance1	**0.791**	0.130	0.062	0.137	0.160	0.253	0.147	0.065	-0.048
Surveillance2	**0.837**	0.226	0.153	0.170	0.105	0.248	0.054	0.048	0.035
Surveillance3	**0.846**	0.153	0.164	0.050	0.121	0.226	-0.017	0.099	0.000
Surveillance4	**0.827**	0.145	0.121	0.114	0.179	0.169	0.046	0.062	0.031
PassTime1	0.136	**0.867**	0.109	0.077	0.073	-0.026	-0.038	0.109	0.026
PassTime2	0.221	**0.876**	0.137	0.098	0.135	0.048	0.076	0.081	0.055
PassTime3	0.178	**0.841**	0.200	0.129	0.071	0.092	0.082	0.086	0.058
Escape1	0.202	0.146	**0.745**	0.237	0.208	0.147	0.188	0.097	-0.023
Escape2	0.137	0.183	**0.848**	0.048	0.161	0.136	-0.117	0.033	0.011
Escape3	0.136	0.183	**0.765**	0.209	0.242	0.144	0.124	0.043	0.081
Entertainment1	0.278	0.180	0.219	**0.696**	0.315	0.296	-0.002	0.107	0.060
Entertainment2	0.251	0.149	0.192	**0.577**	0.431	0.400	0.060	0.123	0.025
Entertainment3	0.148	0.164	0.226	**0.814**	0.199	0.141	0.076	0.071	0.156
Relaxation1	0.212	0.098	0.234	0.154	**0.822**	0.283	0.048	0.116	0.039
Relaxation2	0.209	0.151	0.248	0.202	**0.822**	0.244	0.059	0.085	0.001
Relaxation3	0.168	0.099	0.198	0.235	**0.784**	0.332	0.120	0.054	0.049
Attitude1	0.229	0.031	0.146	0.134	0.203	**0.845**	0.127	0.163	-0.008
Attitude2	0.229	0.032	0.122	0.072	0.127	**0.874**	0.000	0.131	0.003
Attitude3	0.204	-0.004	0.065	0.198	0.226	**0.850**	0.055	0.140	0.012
Attitude4	0.211	0.045	0.112	0.106	0.221	**0.852**	0.126	0.154	0.007
Intention1	0.204	0.110	0.138	0.100	0.205	0.584	**0.622**	0.330	-0.013
Intention2	0.215	0.137	0.134	0.104	0.205	0.549	**0.650**	0.306	-0.037
SubjectiveNorm1	0.066	0.081	0.053	0.050	0.106	0.181	0.088	**0.939**	0.014
SubjectiveNorm2	0.070	0.077	0.051	0.069	0.040	0.173	0.049	**0.947**	0.007
SubjectiveNorm3	0.079	0.115	0.038	0.053	0.056	0.157	0.075	**0.943**	0.013
Control1	0.022	-0.026	0.129	0.024	0.038	-0.016	0.078	0.105	**0.866**
Control2	-0.042	0.046	-0.029	0.099	0.002	-0.010	-0.048	-0.037	**0.870**
Control3	0.032	0.090	-0.039	0.024	0.019	0.026	-0.040	-0.035	**0.858**

Note:
Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
       a Rotation converged in 6 iterations

Table 2

Correlation Table & Average Variance Extracted Value

	ATT	PBC	SN	INT	SUR	PAS	ESC	ENT	REL
Attitude (ATT)	**0.878**								
Control (PBC)	0.016	**0.648**							
SubjectiveNorm (SN)	0.330	0.054	**0.948**						
Intention (INT)	0.639	0.076	0.492	**0.979**					
Surveillance (SUR)	0.497	0.017	0.221	0.374	**0.816**				
PassTime (PAS)	0.139	0.143	0.275	0.383	0.330	**0.823**			
Escape (ESC)	0.347	0.083	0.263	0.428	0.372	0.417	**0.769**		
Entertainment (ENT)	0.553	0.194	0.309	0.557	0.532	0.377	0.589	**0.806**	
Relaxation (REL)	0.535	0.126	0.206	0.518	0.483	0.281	0.590	0.727	**0.897**

Note:
Average Variance Extracted values are in diagonal and in bold

Table 3

Bootstrap Results for Indirect Effect

	Path Coefficient	SE	BC bootstrap 95% confidence interval^
IV to Mediator (a paths)			
IV1 – Surveillance	0.294***	0.052	
IV2 – Pass Time	-0.127**	0.043	
IV3 – Escape	0.001	0.053	
IV4 – Entertainment	0.294***	0.075	
IV5 – Relaxation	0.3030***	0.629	
Direct Effects of Mediator on DV (b paths)			
Attitude	0.695***	0.073	
Total Effect of IV on DV (c path)			
IV1 – Surveillance	0.184*	0.075	
IV2 – Pass Time	0.019	0.062	
IV3 – Escape	-0.034	0.076	
IV4 – Entertainment	0.291**	0.108	
IV5 – Relaxation	0.384***	0.076	
Direct Effect of IV on DV (c-prime path)			
IV1 – Surveillance	-0.021	0.069	
IV2 – Pass Time	0.107	0.055	
IV3 – Escape	-0.035	0.067	
IV4 – Entertainment	0.087	0.098	
IV5 – Relaxation	0.174	0.083	
Indirect Effects of IV on DV			
IV1 – Surveillance	0.205	0.049	(0.1151..0.3051)
IV2 – Pass Time	-0.089	0.033	(-0.1567..-0.0264)
IV3 – Escape	0.001	0.047	(-0.0889..0.0972)
IV4 – Entertainment	0.2045	0.069	(0.0695..0.3409)
IV5 – Relaxation	0.2107	0.058	(0.1013..0.3357)
Omnibus	0.3117	0.049	(0.2255..0.4213)

Note: ^ Number of Bootstrap Resamples=2000; IV= independent variable; DV=dependant variable; BC=bias corrected; Significance: *** *p< .001; **p< .01; *p<.05*
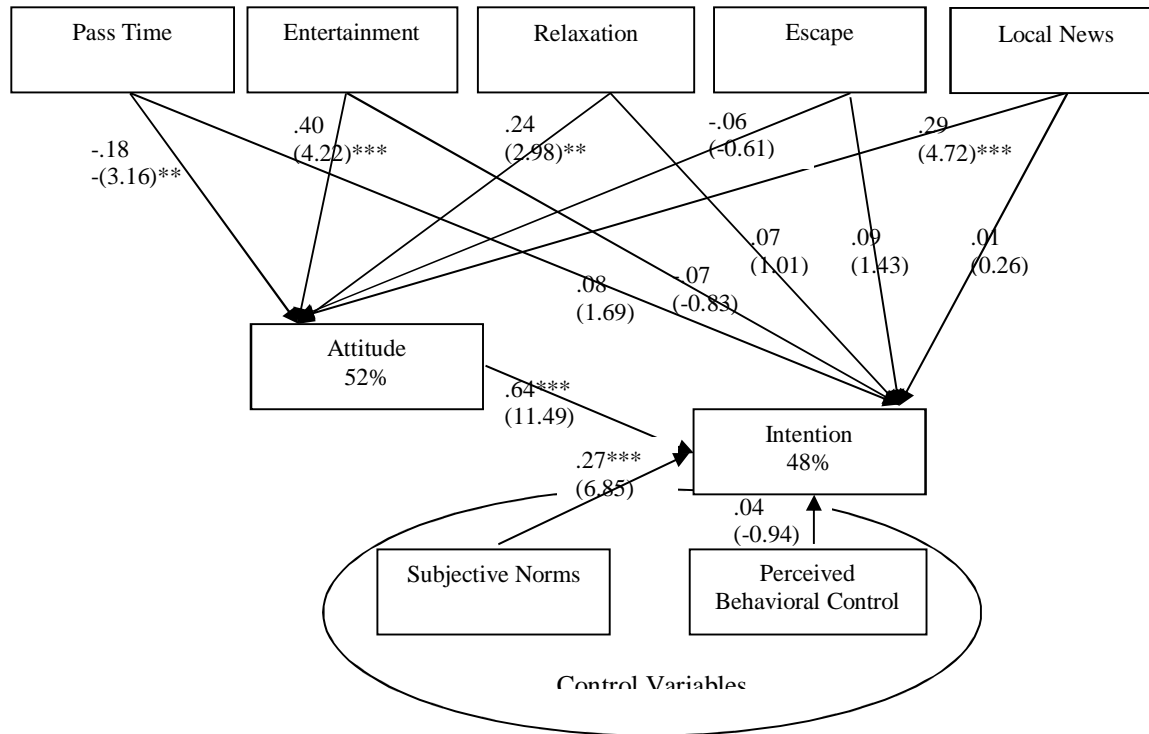
Figure 1. The result of the structural model; fit indices were $\chi 2 = 460$; df = 316; SRMR = .04;

CFI = .99; IFI = .99; NFI=.98; TLI = .99; RMSEA=.039; R2 was Hayduk's Blocked-Error;

Reduced Form Equation; *t-value* is in parentheses; * = p <.05; ** = p <.01; *** = p <.001

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