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Psychological empowerment on social media: Who are the empowered users?

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ABSTRACT

This paper introduces the psychological empowerment framework from community psychology to the social media context. Intrapersonal empowerment and interactional empowerment are tested as two focal components of the empowerment process at the individual level. This paper aims to assess the connections between active and passive social media use and psychological empowerment. An online survey was conducted through an online panel (MTurk) with 371 effective responses. Results showed that active use was positively related to both intrapersonal and interactional empowerment, while only a weak association was found between passive use and interactional empowerment.

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1. Introduction

In spring 2013, Hertz, the car rental company, began formally accepting complaints through the micro-blogging site Twitter. Hertz's program is an example of a move by corporations to actively manage their brands in the online conversations enabled by social media. This activity is particularly targeted at consumers who are seen to be driving a shift in marketplace power structures. Social media are quietly, but rapidly, changing the ecosystem of influence in the virtual sphere (Hanna, Rohm, & Crittenden, 2011).

Social media have enabled users to exert their power to virally affect organizational decisions. Consumers were found to be highly aware of their influence over others online and the collective power that they may exert over companies (Li & Stacks, 2014). Through the social networking sites such as Facebook, Twitter, and Instagram, the networked population is gaining greater access to information, communicating more freely, and building stronger rapport through various online groups. The connectivity established through social media can enhance users' abilities to take collective actions and demand for social change (Shirky, 2011). This empowered action could spread to a large population with rapid speed, thus making a considerable impact. The most active users groups, who are often the opinion leaders on the virtual sphere, can influence the organizational decision-making in, sometimes, a rather dramatic manner, such as crisis situations.

Investigation of public empowerment has been a popular topic in community psychology and marketing research. In public relations research, social media empowerment has received nothing more than passing mentions. Involving direct public engagement, empowerment falls under the realm of the public relations discipline, but has received little empirical attention other than in organizations' internal communication setting, such as employee empowerment (Chiles & Zorn, 1995; Men, 2011; Men & Stacks, 2013) and empowering the public relations function as organization's dominant coalition

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(Berger, 2005; Grunig, 2006; Holtzhausen & Voto, 2002). In the external context, the role of the public relations endeavor in the power dynamics certainly deserves attention. It is a much-needed investigation in our field to understand the underlying psychological mechanism of the rising power of external audiences. From a practical perspective, one of the key challenges for the organization's social media monitoring team is to identify the opinion leaders in these social networks. These are usually empowered social media users who are actively engaged with content creation.

The purpose of this paper is to introduce psychological empowerment construct into the public relations literature. Specifically, this paper integrates past theoretical development of the empowerment construct from community psychology literature, and tests and validates the intrapersonal and interactional empowerment measurement scales in the social media context. This paper also seeks to empirically test the connections between active and passive social media use and various aspects of psychological empowerment.

2. Literature review

2.1. Intrapersonal and interactional empowerment

Empowerment is a multi-level, open-ended construct that includes the individual level (Leung, 2009; Mo & Coulson, 2010; Schneider, Von Krogh, & Jäger, 2013), organizational level (Berger, 2005; Holtzhausen & Voto, 2002; Peterson & Zimmerman, 2004), and community level (Hur, 2006; Zimmerman, 2000; Zimmerman & Rappaport, 1988; Zimmerman & Zahniser, 1991). Empowerment can be viewed as a process (Mo & Coulson, 2010) or an outcome (Hur, 2006; Perkins & Zimmerman, 1995). Meanwhile, empowerment could refer to the act of empowering (Thorlakson & Murray, 1996) and the internal mental process of the individual being empowered (Menon, 1999). Menon (1999) defined psychological empowerment from the employee perspective as a cognitive state characterized by a sense of perceived control, perceptions of competence, and goal internalization. Studies of empowerment can be found in a variety of disciplines, including political science, social welfare, education, health, management, and community psychology (see Hur, 2006 for a summary).

This study adopts the psychological empowerment construct from community psychology research. Psychological empowerment in this study refers to the expression of the empowerment construct at the individual level. It is described as “the connection between a sense of personal competence, a desire for, and a willingness to take action in the public domain” (Zimmerman & Rappaport, 1988, p. 725). There are three underlining assumptions for psychological empowerment (Zimmerman, 1995). First, empowerment takes different forms for different people. Individual characteristics such as age, gender, and socioeconomic status affect how empowerment is perceived and acted upon. Second, empowerment takes different forms in different contexts. This indicates that empowerment varies based on context. For example, in an authoritarian organizational context, collective action may be a more salient trait for empowered individuals, while in a participatory organization, perceived competence or desire for control would be more relevant. Third, psychological empowerment is not a static trait; rather, it fluctuates over time. This suggests that individuals may become more empowered over time and that some people may be more empowered than others.

The empowerment theory (Zimmerman, Israel, Schulz, & Checkoway, 1992; Zimmerman, 1995, 2000) holds that psychological empowerment includes intrapersonal, interactional, and behavioral components. The *intrapersonal empowerment* component refers to how individuals think about themselves and their capability to influence others as well as the social and political systems (Menon, 1999; Zimmerman & Rappaport, 1988). Literature from various disciplines has used different terminologies in describing the intrapersonal aspects of psychological empowerment (Petrovčič & Petrič, 2014), but all strongly relies on the conceptual model proposed by Zimmerman (1995). The Zimmerman (1995) model suggests that intrapersonal empowerment includes three sub dimensions of *control*, *self-efficacy* and *perceived competence* (Leung, 2009; Zimmerman, 1995; Zimmerman and Zahniser, 1991). Further, the control aspect refers to beliefs about one's ability to exert influence in various contexts; the self-efficacy aspect refers to self-assessment of one's abilities to carry out certain tasks; the perceived competence aspect refers to perceptions of one's capability to perform a job or task well (Hur, 2006; Petrovčič & Petrič, 2014; Zimmerman, 1995; Zimmerman & Rappaport, 1988 Zimmerman, 1995).

The *interactional empowerment* component refers to one's intellectual understanding of the social environment around them and the knowledge and resources required to produce change (Zimmerman, 1995). The interactional component addresses the belief or awareness of the options available to achieve goals and an understanding of the norms and values of a particular context. This cognitive understanding and learning about the social environment leads to the development of decision-making and problem-solving skills necessary to actively engage one's environment (Zimmerman, 2005; Zimmerman et al., 1992 Zimmerman et al., 1992). Finally, the *behavioral* component of psychological empowerment refers to the empowered actions that may exert influence on outcomes (Zimmerman, 1995). This is achieved through participation in activities and community organizations such as political groups, self-help groups, religious groups, or service organizations, or helping others to cope with problems (Zimmerman et al., 1992).

Early theoretical investigations of empowerment have largely focused on the intrapersonal empowerment aspect. However, scholars have raised the importance to investigate the interactional aspect of psychological empowerment. Speer's (2000) study offers insights and empirical evidence that individual's personal sense of control and efficacy (intrapersonal empowerment) differs from one's intellectual understanding of power and social change (interactional empowerment). This is in response to the critique by Riger (1993) that the traditional empowerment theory may overly emphasize on the individual mastery and control rather than the cooperation or community elements. In other words, “can an emphasis on

individual mastery or a sense of empowerment ever produce the social change outcomes that empowerment purports to produce, given the macro-level forces which contribute to social and psychological distress” (Speer, 2000, p.59)? Therefore, “measuring only a sense of empowerment elevates individualism, thus undermining the collective efforts required to create change in social systems” (Speer, 2000, pp. 52).

Zimmerman (1995) cautioned that all three components (intrapersonal, interactional and behavioral) must be measured to fully capture psychological empowerment construct. The measure should also be adjusted for the study population and context. Speer's (2000) investigation addressed this concern by creating and testing a measurement scale of interactional empowerment, which incorporates the collective aspect of empowerment by two dimensions of *collective action* and *interpersonal relationships*. Specifically, collective actions refer to one's understanding of the collective mechanism needed and the group power to create change. The interpersonal relationships addresses one's understanding of the intimate interpersonal relationships needed to develop social power (Speer, 2000).

It is important to note that a psychologically empowered individual may possess either or both of the intrapersonal and interactional components. This study focuses on psychological empowerment as a process, so the behavioral component is not the focal interest of this research. Instead, both dimensions of intrapersonal and interactional empowerment are investigated. This study is interested in whether Internet users' social media activities affect intrapersonal and interactional empowerment in the cyber space, as discussed in the following sections.

2.2. Passive and active social media use

Social media are Internet based applications and technologies that “enable participation, connectivity, user-generated content, sharing of information, and collaboration among a community of users” (Henderson & Bowley, 2010, p. 239). Different types of social media include social networking sites (SNS) such as Facebook, video sharing sites such as YouTube, blogs, podcasts, wikis, and the online virtual world. Social media have created a vast connection in the virtual world among the global community with a collaborative and participatory culture (Henderson & Bowley, 2010). They encourage users to “discuss, debate, and collaborate with one another as millions more watch, listen and learn” (McConnell & Huba, 2007, p. x).

Researchers have argued that social media have fundamentally changed the marketing ecosystem of influence (Constantinides, Romero, & Boria, 2009; Hanna et al., 2011). Instead of passive information receipts in the marketing process, consumers today are taking an increasingly active role in co-creating contents online, especially when highly engaged. Existing studies of online consumer behavior have suggested several user typologies classified by specific goals and behaviors (Li & Bernoff, 2008; Mathwick, 2002; Muntinga, Moorman, & Smit, 2011; Shao, 2009). For example, Mathwick (2002) suggested four internet user types from the relationship orientation perspective: Lurkers, personal connectors, socializers, and transactional community members, with lurkers being the most inactive groups. Similarly, Li and Bernoff (2008) classified consumers' online behavior within the social media context as six user groups: inactives, spectators, joiners, collectors, critics, and creators.

As another example, Shao (2009) and Muntinga et al. (2011) suggested a continuum of consumers' online involvement: *consuming*, *contributing*, and *creating*, representing an increase in levels of engagement. Consuming represents a minimum engagement: consumers participate without actively contributing or creating content on the social media sites. Contributing is a middle level of engagement, which includes “both user-to-content and user-to-user interactions” (Muntinga et al., 2011, p. 17). Examples of contributing behaviors include engaging in conversations on the social media sites, such as commenting on Facebook posts or replying to other users' comments. Creating, the highest level of user engagement, involves actively producing and publishing content that others consume and contribute to.

Although the specific classifications of consumers' online activity differ among scholars, one thing upon which the researchers seem to agree is that there are different levels of involvement among social media users. Some users are more active in content creation while others are more inclined to content consumption. Pagani and Mirabello (2011) combined Li and Bernoff's (2008) user typology with usage typology and suggested two usage types: *passive use* and *active use* of social media. The passive social media users are the spectators, the concept of which is similar to the consuming level of user engagement as identified by Muntinga et al. (2011). The active social media users are the creators, critics, collectors, and joiners, the definitions of which can be found overlapping as the contributing and creating levels of user engagement. Existing literature offers no consensus on how to classify user engagement online (Shao, 2009). With most of the existing typologies being qualitatively based, valid and reliable measures have yet to be developed (e.g., Li & Bernoff, 2008; Muntinga et al., 2011; Shao, 2009). Thus, this paper adopts the broader framework of active and passive social media as suggested by Pagani and Mirabello (2011). The active/passive use framework covers the essence of differentiating various levels of user engagement and offers a validated measurement scale as well.

2.3. Social media empowerment

The distinction between active and passive social media use is closely associated with psychological empowerment enabled by the new media platform. Researchers have examined how the new technologies have empowered individual users (Constantinides & Fountain, 2008; Füller, Mühlbacher, Matzler, & Jaweck, 2009; Hanna et al., 2011; Heinonen, 2011; Kucuk & Krishnamurthy, 2007). The user-generated content on social media enables individuals to make their own voices heard and grant consumers more control and power over the market process. The influence of such consumer empowerment

for organizational communication management is far reaching, not only in the form of information sourcing but also in the communication process, where individuals can engage in direct dialogues with companies to express frustration and confront wrongdoings (Constantinides & Fountain, 2008; Li & Stacks, 2014). Consequently, the active users become the opinion leaders on the Internet that may influence the organizational decisions.

Empowerment has been identified as a key motive for consumer online engagement (Wang & Fesenmaier, 2003; Muntinga et al., 2011). Consumers were found to be highly aware of their influence over others online and the collective power that they may exert over companies through virtual brand communities (Constantinides et al., 2009). Thus, they are using social media to exert their influence and power over other people or companies (Muntinga et al., 2011). A good example of social media empowerment is citizen journalism, in which case exposure of product failures or organizational misconduct could reach a large audience online in a short time to make a considerable impact (Leung, 2009). Consumer empowerment has also been found to influence product design through virtual co-creation online (Hoyer, Chandy, Dorotic, Krafft, & Singh, 2010; Füller et al., 2009). Moreover, empowerment permitted by social media has been examined within frameworks of health communication and healthcare management (e.g., Lober & Flowers, 2011; Rogers, Chamberlin, Ellison, & Crean, 1997).

Past research has suggested linkages between citizen participation and psychological empowerment (Zimmerman & Rappaport, 1988): individuals highly engaged in community and organizational participation also indicated higher levels of psychological empowerment than the less engaged individuals. In addition, a great deal of research studying online health-related support groups have found different levels of empowerment between lurkers, the inactive online user groups, and the posters, the most active groups (Barak, Boniel-Nissim, & Suler, 2008; Mo & Coulson, 2010; Petrovčič & Petrič, 2014; Schneider et al., 2013; van Uden-Kraan, Drossaert, Taal, Seydel, & van de Laar, 2008). There is empirical evidence of differences in terms of psychological empowerment between active online users and passive users (Barak et al., 2008; Mo & Coulson, 2010; van Uden-Kraan et al., 2008). Leung (2009), for example, found a positive association between user-generated content and intrapersonal empowerment, especially for self-efficacy and perceived competence. Researchers argue that active participation increases senses of self-efficacy and self-esteem, which lead to greater personal empowerment (Barak et al., 2008). Lurkers, while they experience a certain level of empowerment, the empowerment strength is much lower than the groups actively engaged in content posting (Mo & Coulson, 2010).

On the other hand, Petrovčič and Petrič (2014) examined the difference of intrapersonal and interactional empowerment between lurkers and posters. They found posters indicated significantly higher interactional empowerment than lurkers, but no difference was observed for intrapersonal empowerment. Posting frequency was found to be positively associated with interactional empowerment (Petrovčič & Petrič, 2014). Petrovčič and Petrič's (2014) findings pose an interesting contrast with other research where a positive association was found between active online media use and intrapersonal empowerment (e.g., Barak et al., 2008; Leung, 2009; Mo & Coulson, 2010; van Uden-Kraan et al., 2008). Theoretically, it could be argued that intrapersonal empowerment is an individual personality measure, which should not be easily influenced by media usage. In other words, for an individual with low desire for control, low self-efficacy and perceived competence, it is unlikely that active social media use would alter these individual traits. Given the conflicting empirical findings and theoretical considerations about media use and intrapersonal empowerment, the following research question is posed:

RQ1: Are active social media use and passive social media use related to intrapersonal empowerment?

In addition, limited attention has been given to the interactional aspect of psychological empowerment and its association with social media use. As argued by Speer (2000) and Zimmerman (1995), interactional empowerment is an essential aspect of psychological empowerment and it should be empirically measured to fully capture the empowerment construct. This is especially true in the social media context because of the collectivity established through online networks. It is expected that users' familiarity and usage of new media platforms would enhance their intellectual understanding of resources online and the actions needed to produce change, which define the interactional empowerment. Based on the reasoning above, the following hypotheses are proposed:

- H1.** Active social media use is positively related to interactional empowerment.
- H2.** Passive social media use is positively related to interactional empowerment.
- H3.** The relationship between active social media use and interactional empowerment is stronger than the relationship between passive social media use and interactional empowerment.

3. Method

3.1. Pretest

To test the study instruments, a pretest was conducted through an online survey with 117 students from a university in the southeastern United States. The result of the pretest indicated, in general, good reliability of all the measures. However, the active use and passive use scales were found to be positively skewed. Thus, the response categories were adjusted in the main study with greater differentiation on the positive end of the scale to obtain a normal distribution. In addition, for the interactional empowerment measures (i.e., interpersonal relationships and collective action scales), wordings were adjusted in the main study to better reflect the study context. The final adjusted survey items can be found in Table 2.

Table 1
Demographics and descriptive statistics.

	(%)	N
Age ($M = 32, SD = 11.29$)		
Male	57.70%	214
Female	42.30%	157
Ethnicity		
Asian	8.40%	31
Black/(non-Hispanic)	4.00%	15
Hispanic/Latino	5.40%	20
White (non-Hispanic)	79.80%	296
Other	1.60%	6
Prefer not to say	0.80%	3
–		
Education		
Less than high school	0.30%	1
High school/GED	11.60%	43
Some college	29.60%	110
Associates degree	8.90%	33
Bachelor's degree	40.40%	150
Master's degree	6.70%	25
Doctorate degree	0.80%	3
Professional degree	1.60%	6
Income		
\$20,000 or under	28.30%	105
\$20,001 to \$40,000	28.60%	106
\$40,001 to \$60,000	18.10%	67
\$60,001 to \$80,000	11.30%	42
\$80,001 to \$100,000	4.30%	16
\$100,000 and higher	4.90%	18
Prefer not to say	4.60%	17

3.2. Main study data collection and participants

Data collection. For the main study, an online survey was designed using Qualtrics and the survey link was distributed through the Amazon Mechanical Turk website. A total of 564 responses were collected. The Amazon Mechanical Turk (MTurk) is an online labor market run by Amazon.com where requesters can post human intelligence tasks (HITs) for a small amount of monetary incentives. Individuals can register themselves as “workers” with valid identity and e-mail address to receive payment for the HITs they completed. A requester can either approve or reject the HITs completed by the workers based on the quality of the work. The MTurk site started as a crowdsourcing platform. It is now widely used for behavioral research and survey studies ([Goodman, Cryder, & Cheema, 2013](#); [Mason & Suri, 2012](#)).

One may wonder about the representativeness of the MTurk participants and the quality of the data because the payment is relatively low (\$1.38 hourly rate on average, [Mason & Suri, 2012](#)) compared to other online panels. Abundant research has demonstrated that MTurk is actually an ideal platform to obtain inexpensive, high quality panel data for academic research ([Buhrmester, Kwang, & Gosling, 2011](#)). The demographic data gathered through MTurk generally resemble patterns of data from other internet-based research, but with a higher internal consistency and slightly greater diversity ([Buhrmester et al., 2011](#); [Mason & Suri, 2012](#)). Moreover, the fluctuations in compensation rates were found not to affect data quality ([Buhrmester et al., 2011](#); [Buhrmester et al., 2011](#)).

Inclusion and exclusion criteria. For sample inclusion criteria, this project adopted the commonly suggested qualification that required 90% of the tasks done by a worker had been approved by requesters ([Mason & Suri, 2012](#)). The workers' location was also restricted to U.S. To ensure data quality, two attention check questions were included in different sections of the survey where the participants were explicitly asked to select a particular response (e.g., agree) as their answers. Those who missed either or both of the attention check questions were excluded from the final sample. In addition, Amazon provides a spreadsheet with IDs of all the workers who completed the task. The worker IDs and respondents' IP addresses were carefully monitored to ensure no duplicate responses were recorded. After filtering through all the above-mentioned exclusion criteria, a final sample of 371 effective responses were retained, generating an effective response rate of 65.78%.

Participants. The final sample consisted of 57.7% male and 42.3% female. As shown in [Table 1](#), the respondents' average age was 32 ($SD = 11.29$). The majority of the respondents indicated themselves as being non-Hispanic White (79.8%), with a bachelor's degree (40.4%), and having an annual income of below \$40,000 (56.9%).

3.3. Measures

All study measures were adopted from previous research and adapted to fit in the current study context. Measures of active and passive media use were adapted from scales developed by [Pagani and Mirabello \(2011\)](#). Specifically, active use

Table 2
Confirmatory factor loadings, reliability and descriptive statistics.

Factors	Indicators	Std. ^a	S.E.
Passive use (<i>M</i> = 4.86, <i>SD</i> = 1.61, α = .81)	I watch videos or pictures posted on social media sites.	-. ^a	-
	I read online discussions on social media sites.	-	-
	I read user comments/ratings/reviews on social media sites.	-.90	-.01
	Composite	.90	.01
Active use (<i>M</i> = 3.94, <i>SD</i> = 1.77, α = .90)	I comment on others' posts on social media sites.	-	-
	I "like" posts on companies' Facebook sites (clicking the <i>like</i> button).	-	-
	I share contents on social media sites with my connections.	-	-
	I post contents on my own social media page.	-.95	-.00
Composite	.95	.00	
Self-efficacy (<i>M</i> = 5.33, <i>SD</i> = .93, α = .89)	I can remain calm when facing difficulties because I can rely on my coping abilities.	.73	.04
	No matter what comes my way, I am usually able to handle it.	.80	.03
	I am confident that I could deal efficiently with unexpected events.	.85	.02
	Thanks to my resourcefulness, I know how to handle unforeseen situations.	.79	.04
I consider myself to be generally more capable of handling difficult situations than others.	.76	.03	
Perceived competence (<i>M</i> = 4.52, <i>SD</i> = 1.19, α = .78)	I am often a leader in groups.	.79	.04
	I find it very hard to talk in front of a group. (R)	.53	.05
	I can usually organize people to get things done.	.80	.03
	Other people usually follow my ideas.	.75	.03
Control (<i>M</i> = 5.60, <i>SD</i> = .91, α = .65)	I enjoy making my own decisions.	.68	.07
	I prefer a job where I have a lot of control over what I do and when I do it.	.69	.06
	I would rather run my own business and make my own mistakes than listen to someone else's orders.	.58	.06
Collective action (<i>M</i> = 5.08, <i>SD</i> = 1.00, α = .78)	Power in the online community lies in the relationships between people.	.80	.03
	A person becomes powerful through other people in the online community.	.71	.04
	The only way I can have power in the online community is by connecting with others.	.68	.05
Interpersonal relationships (<i>M</i> = 5.15, <i>SD</i> = .97, α = .75)	Only by working together can people get power to exert influence in the online community.	.77	.04
	I can have a voice in wider social issues by working in an organized way with other members of an online community.	.64	.05
	Power in the online community is collective, not individual.	.73	.04

^a Standardized path coefficients. All coefficients are significant at $p < .001$.

^a Composite scores were used for active and passive use, so the item loadings were not estimated.

($\alpha = .90$) was measured by four items, such as “I comment on other’s post on social media sites.” Passive use ($\alpha = .81$) was measured by three items, such as “I read online discussions on social media site.” Both measures were based on a seven-point scale from “never” to “constantly/all the time.” The intrapersonal empowerment measure was adapted from Leung (2009) and contained three sub-dimensions: self-efficacy measured by 5 items ($r = .89$), perceived competence measured by 4 items ($r = .78$), and desire for control measured by 5 items ($r = .65$). For interactional empowerment, the measure developed by Speer (2000) was adapted. Two dimensions of collective action, measured by 3 items ($r = .78$), and interpersonal relationship, measured by 3 items ($r = .75$), were tested. All empowerment measures were based on seven-point scale with 1 being strongly disagree and 7 being strongly agree. Finally, demographic measures of age, gender, ethnicity, education and income were included. A detailed description of scale items can be found in Table 2.

4. Results

Because the hypothesis testing involves relationships between multi-level, multi-dimensionality latent constructs, latent variable path analysis (also known as the structural equation modeling approach) was conducted with Mplus 7 under MLR estimation to test the hypothesized latent variable relationships.

Specifically, because the measures for active and passive social media use are not construct based, the measurement portions of these two variables are of less interest. Thus, to reduce model error, the four items measuring active usage and the three items measuring passive use were each averaged to form a single index. The latent variables active use and passive use were then each indexed by a composite variable. This procedure would have caused the measurement portion of the model to be under-identified without further constraints. To solve this identification problem, a common approach as suggested by Keith (2006) was adopted by constraining the error-unique variance of the measured variable to $(1 - r) * V$, in which r is the reliability of the observed variable, and V is the variance of the observed variable. Such a procedure would create a good estimate of the variance in the observed variable (the indicator) that could only be attributed to the error term. For example, the reliability of active use was .90, and its variance was 3.14. Hence, the estimate of error variance for active use was calculated as: $(1 - .90) * 3.14 = .31$. The error variance for passive use was formulated in the same fashion and then fixed in the model.

For the intrapersonal and interactional empowerment measures, the measurement model is of focal interest to this study. Assessing the scale validity and dimensionality is of high interest because the scales were adapted to the social media context. Thus, the full measurement portion of the model was evaluated with intrapersonal empowerment being a second order construct indexed by three first order factors of control, self-efficacy, and perceived competence. Each factor was then measured by four or five individual items. Similarly, interactional empowerment was modeled as a second-order construct with two first order factors of collective action and interpersonal relationships, both of which were measured by three items. In addition, in specifying the model, latent intrapersonal empowerment and interactional empowerment were allowed to correlate due to the consideration that both were measures of the psychological empowerment construct, which would have been a third order factor if modeled.

A confirmative factor analysis was first conducted to assess the measurement portion of the model with all structural paths being saturated. Because the scales were adapted from the literature, the observed variables were expected to load on only one factor and error terms were not allowed to covary. Results showed that all indicators loaded significantly on the corresponding latent construct ($p < .001$). Overall, the measurement model fit was good across most goodness-of-fit indexes: $\chi^2/\text{degree of freedom}$ ratio was 1.77 ($\chi^2 = 354.07$, $df = 200$), root mean square error of approximation (RMSEA) was .04 (.04, .05), comparative fit index (CFI) was .95, SRMR was .05 and Tucker–Lewis index (TLI) was .94. However, the modification indices indicated a weakness in the control dimension of the intrapersonal empowerment scale with two of the five items. Large modification indices were found associated with the error terms of these two items. To further explore this issue, an explorative factor analysis (EFA) was conducted with Varimax rotation of all fourteen intrapersonal empowerment items. The EFA result indicated a three-factor solution with each item loading on the correct corresponding construct, but for the two problematic items in the control dimension. The results of CFA and EFA both indicated that these two items should be discarded from the analysis to improve measure validity and reliability. The adjusted measure slightly improved the scale reliability, but greatly enhanced overall model fit. The retained final scale items can be found in Table 2.

In testing the research question and hypotheses, active use and passive use were each modeled as the exogenous variable predicting both intrapersonal and interactional empowerment. This allows for independent examination of the effect of active and passive use on both empowerment constructs. Results showed that active use was positively related to both intrapersonal empowerment ($B = .11$, $p < .05$) and interactional empowerment ($B = .23$, $p < .01$), and passive use was positively related to interactional empowerment ($B = .14$, $p < .05$), but not intrapersonal empowerment ($B = .08$, $p = .22$). Thus, both Hypothesis 1 and Hypothesis 2 were supported. In addition, the standardized path coefficient from active use to interactional empowerment ($B = .23$) was larger than standardized path coefficient from passive use to interactional empowerment ($B = .14$), which supported Hypothesis 3. To test for the robustness of this result, a third model was tested with both active use and passive use being exogenous variables predicting intrapersonal and interactional empowerment. In this model, latent active use and passive use were allowed to freely correlate, and so were latent intrapersonal empowerment and interactional empowerment. This model allows for examination of the “unique” contribution of each exogenous variable on Y while controlling for the effect of the other exogenous variable. Overall, the structural equation modeling results suggested good model fit: CFI = .96, TLI = .95, RMSEA = .04 (.03, .05), SRMR = .05, $\chi^2(161, N = 371) = 267.78$, $p < .001$. As shown in Fig. 1, the

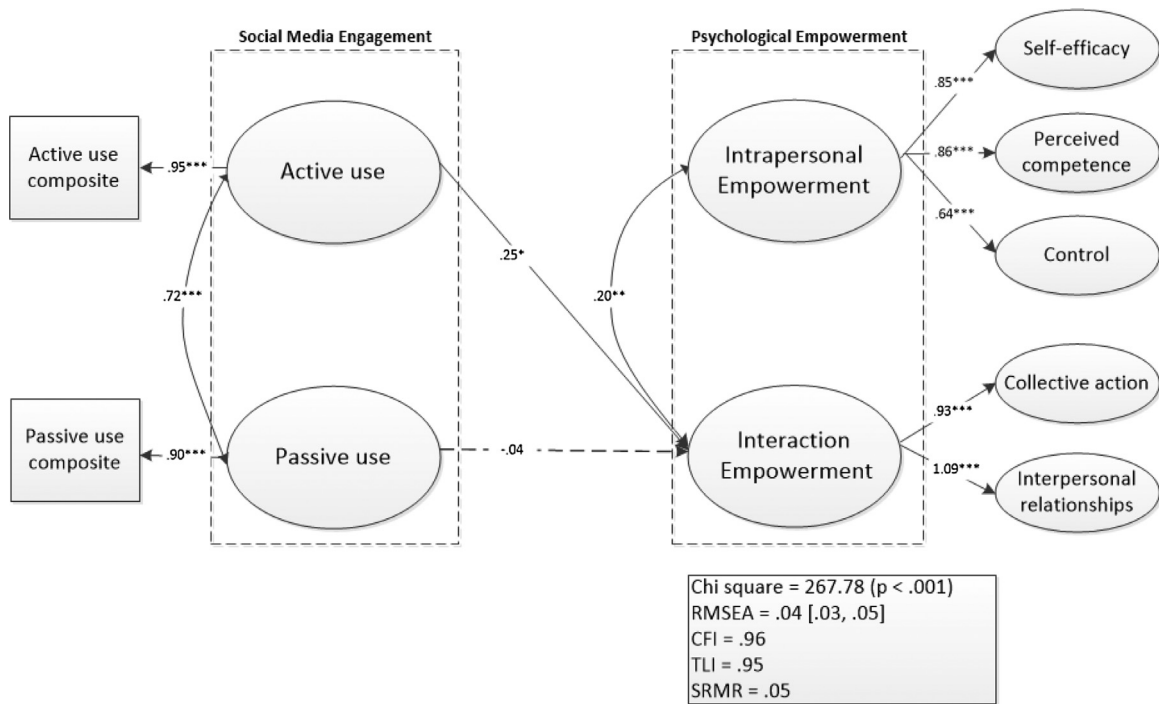


Fig. 1. Model results.

results indicated only the path from active use to interactional empowerment was significant ($B = .25, p < .05$). This confirmed the robustness of Hypothesis 1 and Hypothesis 3.

5. Discussion

5.1. Theoretical implications

This paper introduces psychological empowerment as an emerging area in public relations and social media research. Empowerment is a multi-level, open-ended construct that includes the individual level, organizational level, and community level (Hur, 2006; Peterson & Zimmerman, 2004; Zimmerman & Rapport, 1988; Zimmerman and Zahniser, 1991; Zimmerman & Rapport, 1988; Zimmerman & Zahniser, 1991). Meanwhile, empowerment can be viewed as a process (Mo & Coulson, 2010) or an outcome (Hur, 2006; Perkins & Zimmerman, 1995). The investigation in this paper focuses on the empowerment process at the individual level. Specifically, the intrapersonal empowerment and interactional empowerment adopted from community psychology (Zimmerman, 1995) were introduced as two focal constructs that should be considered to fully capture the scope of psychological empowerment.

Past research has examined empowerment in both offline and online settings. However, investigation of empowerment in the social media context is quite limited. This research aims to bridge this gap by testing the association between active/passive use and perceived intrapersonal and interactional empowerment.

The research question proposed in this study addressed the relationships between active and passive social media use and intrapersonal empowerment. Existing literature offered conflicting findings to this question, as some researchers found online media use to positively influence intrapersonal empowerment (e.g., Barak et al., 2008; Leung, 2009), while others found no effect (e.g., Petrovčič & Petrič, 2014). This study found only a weak association between active social media use and intrapersonal empowerment and no effect of passive use. It was also found that after controlling for the effect of passive use, the weak relationship between active use and intrapersonal empowerment also disappeared. This finding is interesting in that it adds empirical evidence to both camps of argument. Intrapersonal empowerment is the personal level measure that captures aspects of control, self-efficacy and perceived competence (Zimmerman, 1995; Zimmerman & Zahniser, 1991). Theoretically, being a personal quality measure, intrapersonal empowerment emphasizes a personality trait that should be relatively stable across time. It seems unlikely that this personal trait will be easily altered by contextual influences. Yet, as argued by some researchers, given enough time and exposure, active participation on the new media could increase the personal sense of self-efficacy and self-esteem, which leads to greater personal empowerment (Barak et al., 2008). This is especially true for the “millennial” generation, born roughly after early 1980s, who were seen as growing up with Internet and new technology and use of social media have become a part of their everyday lives (Lenhart, Purcell, Smith & Zickuhr, 2010). Given the immersion of social media and the strong dependency and attachment developed among young adults, the

mixed findings suggest maybe social media do have an influence on the personal sense of control, efficacy, and competence. However, this effect takes time to develop and reveal itself, and, as the findings suggest, the effect may be more salient for certain demographics or usage patterns.

The study hypothesized positive relationships between active and passive social media use and interactional empowerment, which were fully supported. Empowerment theorists have cautioned the need for empirical investigation of the interactional aspect of empowerment (Speer, 2000; Zimmerman, 1995), yet this concern has not been fully addressed. Literature on empowerment has been largely focused on the personal aspect of empowerment. This study contributes to this research gap by examining the interactional empowerment in the social media context. Interactional empowerment refers to one's intellectual understanding of the social environment around them, the awareness of the options available to achieve goals, and the knowledge and resources required to produce change (Zimmerman, 1995). On social media, this definition transfers to an individual's awareness of his/her influence over others online and the collective power that he/she may exert over organizations and societies through the online networks and the virtual communities. It also requires a familiarity with the new media platforms and a key understanding of the connectivity established in the virtual sphere. The study findings supported this argument by showing that various levels of social media usage indeed predict the interactional empowerment, and such effect is stronger for active use than passive use. In other words, the more actively engaged the users are, the more empowered they feel.

Overall, the study showcases social media engagement, especially active usage, as antecedent to psychological empowerment. It is worth noting that all the effects found in the study are relatively small, which is consistent with previous research (Leung, 2009; Petrovčič & Petrič, 2014). The small effect size is expected because psychological empowerment is formed by many individual, societal, and contextual factors, of which social media use is only a small part of. However, this small effect shall never be overlooked as it can create dramatic social changes.

Finally, the study verified the scale reliability and validity of the empowerment construct in the social media context. The scales verified in the study can be adopted by future research studying similar context. However, as cautioned by Zimmerman (1995, 2000), a global measure of psychological empowerment may not be feasible or conceptually sound because of the specific meaning of the psychological empowerment construct is context- and population-specific. Given that the social media context is subject to unique norms (e.g., Li & Li, 2014), future research should adapt the measures to different context with caution.

5.2. Practical implications

There are several practical implications associated with the study findings. First, the study illustrates the empowerment mechanism on social media being composed of both the individual and contextual factors: while the intrapersonal aspect addresses the personality differences, the interactional aspect emphasizes on the contextual influences. An empowered individual may possess either or both of the intrapersonal and interactional components of empowerment. The most empowered users, often times acting as the opinion leaders online, may be the individuals who obtained high levels of both intrapersonal and interactional empowerment. These most empowered user groups not only have a high desire for control, perceived self-competence and self-efficacy, they also know well about how to utilize the new media platforms to maximize their influence over others. The empowerment mechanism could also offer explanations for different online user groups. For example, the lurkers, who are the most inactive users online, may be individuals with low intrapersonal and interactional empowerment, as suggested by the study findings. Understanding the empowerment mechanism and how it leads to various behavioral outcomes will help public relations as well as marketing professionals to better engage with the target audience on social media.

Studying social media empowerment also yields great applications for crisis management and relationship management. Past research indicated that power increases an action orientation in the power holder, even in contexts where power is not directly experienced (Galinsky, Gruenfeld, & Magee, 2003). The application for this power-action association can be found in many online complaining behaviors. Compared with private complaining, public complaining spreads negative word of mouth and publicizes the issue to the public. Extreme public complaining behaviors amplify the seriousness of issue and elevate the failure to a scale that deserves public outrage (Ward & Ostrom, 2006). This online public complaining behavior is essentially a demonstration of power. It could also be labeled as the behavioral component of psychological empowerment. Given the fact that intrapersonal empowerment and interactional empowerment are both associated with behavioral outcomes (Zimmerman, 1995), understanding the empowerment process should help public relations professionals to better perform risk assessment, environmental scanning and crisis communication. Companies could also take implications from the empowerment research and apply to consumer relationship management, such as the example given at the beginning of the paper, where Hertz initiated a program to address consumer complaints through Twitter, an action specially oriented towards the empowered user groups.

5.3. Limitations and future research

There are a few limitations related to the study. First, the measure for active and passive social media use, though reflecting different levels of user engagement, is only a rough division of users' social media activities. The active and passive use is not a comprehensive measure of social media's influence and they cannot account for all the variations in perceived

empowerment, especially interactional empowerment. Future research should examine social media usage from other aspects, such as user-generated content and its influence on psychological empowerment. The study would also benefit from including behavioral measures of empowerment, such as asking participants' affiliations with online support groups, virtual communities or intentions for joining such groups. Furthermore, it would be more natural to examine social media use and empowerment in a concrete setting, such as surveying members of a brand's Facebook fan page. This virtual community setting makes the relationship observed between social media engagement and empowerment more directly related. Finally, the associations between social media usage intensity, user and usage typologies, and psychological empowerment offer fruitful areas for future research. Further investigations could focus on the online public complaining behaviors and test for the linkage with social media use and psychological empowerment.

References

- Barak, A., Boniel-Nissim, M., & Suler, J. (2008). Fostering empowerment in online support groups. *Computers in Human Behavior*, 24(5), 1867–1883. <http://dx.doi.org/10.1016/j.chb.2008.02.004>
- Berger, B. K. (2005). Power over, power with, and power to relations: critical reflections on public relations, the dominant coalition, and activism. *Journal of Public Relations Research*, 17(1), 5–28.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3–5.
- Chiles, A. M., & Zorn, T. E. (1995). Empowerment in organizations: employees' perceptions of the influences on empowerment. *Journal of Applied Communication Research*, 23(1), 1–25. <http://dx.doi.org/10.1080/00909889509365411>
- Constantinides, E., & Fountain, S. J. (2008). Web 2.0: conceptual foundations and marketing issues. *Journal of Direct, Data and Digital Marketing Practice*, 9(3), 231–244.
- Constantinides, E., Romero, C. L., & Boria, M. A. G. (2009). Social media: a new frontier for retailers? *European Retail Research*, 22, 1–28.
- Füller, J., Mühlbacher, H., Matzler, K., & Jawecki, G. (2009). Consumer empowerment through internet-based co-creation. *Journal of Management Information Systems*, 26(3), 71–102.
- Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, 85(3), 453–466.
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: the strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making*, 26(3), 213–224.
- Grunig, J. E. (2006). Furnishing the edifice: ongoing research on public relations as a strategic management function. *Journal of Public Relations Research*, 18(2), 151–176.
- Hanna, R., Rohm, A., & Crittenden, V. L. (2011). We're all connected: the power of the social media ecosystem. *Business Horizons*, 54(3), 265–273.
- Heinonen, K. (2011). Consumer activity in social media: managerial approaches to consumers' social media behavior. *Journal of Consumer Behaviour*, 10(6), 356–364.
- Henderson, A., & Bowley, R. (2010). Authentic dialogue? The role of friendship in a social media recruitment campaign. *Journal of Communication Management*, 14(3), 237–257. <http://dx.doi.org/10.1108/13632541011064517>
- Holtzhausen, D. R., & Voto, R. (2002). Resistance from the margins: the postmodern public relations practitioner as organizational activist. *Journal of Public Relations Research*, 14(1), 57–84.
- Hoyer, W. D., Chandry, R., Dorotic, M., Krafft, M., & Singh, S. S. (2010). Consumer cocreation in new product development. *Journal of Service Research*, 13(3), 283–296.
- Hur, M. H. (2006). Empowerment in terms of theoretical perspectives: exploring a typology of the process and components across disciplines. *Journal of Community Psychology*, 34(5), 523–540. <http://dx.doi.org/10.1002/jcop.20113>
- Keith, T. (2006). *Multiple regression and beyond*. Boston: Pearson Education.
- Kucuk, S. U., & Krishnamurthy, S. (2007). An analysis of consumer power on the Internet. *Technovation*, 27(1), 47–56.
- Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). Social media & mobile Internet use among teens and young adults. Millennials. *Pew Internet & American Life Project*.
- Leung, L. (2009). User-generated content on the Internet: an examination of gratifications, civic engagement and psychological empowerment. *New Media & Society*, 11(8), 1327–1347.
- Li, C., & Bernoff, J. (2008). *Groundswell: winning in a world transformed by social technologies*. Boston: Harvard Business School Press.
- Li, Z., & Li, C. (2014). Twitter as a social actor: how consumers evaluate brands differently on Twitter based on relationship norms. *Computers in Human Behavior*, 39, 187–196.
- Li, Z., & Stacks, D. W. (2014). A great leap: Bridging a new media era of organization-public relationships. In: Vaidya, K. (Eds.), *Public Relations and Social Media for the Curious: Why Study Public Relations and Social Media*.
- Lober, W. B., & Flowers, J. L. (2011). Consumer empowerment in health care amid the internet and social media. *Seminars in Oncology Nursing*, 27(3), 169–182. WB Saunders.
- Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, 44(1), 1–23.
- Mathwick, C. (2002). Understanding the online consumer: a typology of online relational norms and behavior. *Journal of Interactive Marketing*, 16(1), 40.
- McConnell, B., & Huba, J. (2007). *Citizen marketers: when people are the message*. Chicago, IL: Kaplan Publishing.
- Men, L. R. (2011). How employee empowerment influences organization-employee relationship in China. *Public Relations Review*, 37(4), 435–437.
- Men, L. R., & Stacks, D. W. (2013). The impact of leadership style and employee empowerment on perceived organizational reputation. *Journal of Communication Management*, 17(2), 171–192.
- Menon, S. T. (1999). Psychological empowerment: definition, measurement, and validation. *Canadian Journal of Behavioural Science*, 31(3), 161.
- Mo, P. K. H., & Coulson, N. S. (2010). Empowering processes in online support groups among people living with HIV/AIDS: a comparative analysis of 'lurkers' and 'posters'. *Computers in Human Behavior*, 26(5), 1183–1193. <http://dx.doi.org/10.1016/j.chb.2010.03.028>
- Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: exploring motivations for brand-related social media use. *International Journal of Advertising*, 30(1), 13–46.
- Pagani, M., & Mirabello, A. (2011). The influence of personal and social-interactive engagement in social TV web sites. *International Journal of Electronic Commerce*, 16(2), 41–68.
- Perkins, D. D., & Zimmerman, M. A. (1995). Empowerment theory, research, and application. *American Journal of Community Psychology*, 23(5), 569–579.
- Peterson, N. A., & Zimmerman, M. A. (2004). Beyond the individual: toward a nomological network of organizational empowerment. *American Journal of Community Psychology*, 34(1–2), 129–145.
- Petrovčič, A., & Petrič, G. (2014). Differences in intrapersonal and interactional empowerment between lurkers and posters in health-related online support communities. *Computers in Human Behavior*, 34, 39–48.
- Riger, S. (1993). What's wrong with empowerment. *Journal of Community Psychology*, 21(3), 279–292.
- Rogers, E. S., Chamberlin, J., Ellison, M. L., & Crean, T. (1997). A consumer-constructed scale to measure empowerment among users of mental health services. *Psychiatric Services*, 48(8), 1042–1047.

- Schneider, A., Von Krogh, G., & Jäger, P. (2013). What's coming next? Epistemic curiosity and lurking behavior in online communities. *Computers in Human Behavior*, 29(1), 293–303. <http://dx.doi.org/10.1016/j.chb.2012.09.008>
- Shao, G. (2009). Understanding the appeal of user-generated media: a uses and gratification perspective. *Internet Research*, 19(1), 7–25.
- Shirky, C. (2011). Political power of social media-technology, the public sphere sphere, and political change. *Foreign Affairs*, 90, 28–41.
- Speer, P. W. (2000). Intrapersonal and interactional empowerment: implications for theory. *Journal of Community Psychology*, 28(1), 51–61.
- Thorlakson, A. J., & Murray, R. P. (1996). An empirical study of empowerment in the workplace. *Group & Organization Management*, 21(1), 67–83.
- van Uden-Kraan, C. F., Drossaert, C. H., Taal, E., Seydel, E. R., & van de Laar, M. A. (2008). Self-reported differences in empowerment between lurkers and posters in online patient support groups. *Journal of Medical Internet Research*, 10(2), e18. <http://dx.doi.org/10.2196/jmir.992>
- Wang, Y., & Fesenmaier, D. R. (2003). Assessing motivation of contribution in online communities: an empirical investigation of an online travel community. *Electronic Markets*, 13(1), 33–45.
- Ward, J. C., & Ostrom, A. L. (2006). Complaining to the masses: the role of protest framing in customer-created complaint web sites. *Journal of Consumer Research*, 33(2), 220–230. <http://dx.doi.org/10.1086/506303>
- Zimmerman, M. A. (1995). Psychological empowerment: issues and illustrations. *Journal of Community Psychology*, 23(5), 581–599.
- Zimmerman, M. A. (2000). Empowerment theory: psychological, organizational and community levels of analysis. In J. Rappaport, & E. Seidman (Eds.), *Handbook of community psychology* (pp. 43–63). New York: Plenum Press.
- Zimmerman, M. A., & Rappaport, J. (1988). Citizen participation, perceived control, and psychological empowerment. *Journal of Community Psychology*, 16(5), 725–750.
- Zimmerman, M. A., & Zahniser, J. H. (1991). Refinements of sphere-specific measures of perceived control: development of a sociopolitical control scale. *Journal of Community Psychology*, 19(2), 189–204.
- Zimmerman, M. A., Israel, B. A., Schulz, A., & Checkoway, B. (1992). Further explorations in empowerment theory: an empirical analysis of psychological empowerment. *Journal of Community Psychology*, 20(6), 707–727.