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Randy Y. M. Wong

Hong Kong Baptist University, rymwong@life.hkbu.edu.hk

Christy M. K. Cheung

Hong Kong Baptist University, ccheung@hkbu.edu.hk

Bo Xiao

University of Hawai'i at Mānoa, boxiao@hawaii.edu

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UNDERSTANDING USERS' WILLINGNESS TO REPORT ONLINE HARASSMENT ON SOCIAL NETWORKING SITES: THE ROLE OF EFFICACY

Randy Y. M. Wong, Department of Finance and Decision Sciences, Hong Kong Baptist University, Hong Kong, rymwong@life.hkbu.edu.hk

Christy M. K. Cheung, Department of Finance and Decision Sciences, Hong Kong Baptist University, Hong Kong, ccheung@hkbu.edu.hk

Bo Xiao, Shidler College of Business, University of Hawai'i at Mānoa, HI, USA, boxiao@hawaii.edu

Abstract

Online harassment is an emerging global societal problem, with its pervasiveness and persistence creating long-lasting adverse psychological consequences to victims. While many social networking sites (SNSs) have started launching online reporting systems to combat online harassment, surprisingly, little empirical research has examined users' willingness to use the system for reporting online harassment. In this study, we propose a research model explaining the role of efficacy in using the online reporting system of SNSs to report online harassment. We expect that the results of this study make significant contributions to research and practice.

Keywords: Online harassment, online reporting system, social cognitive theory, self-efficacy, response efficacy, willingness to report, social networking sites, Facebook.

1 INTRODUCTION

Online harassment is an online abusive interpersonal behavior that is characterized by an individual deliberately disseminating rude, threatening or offensive content directed at one or more individuals through information communications technology (Wolak et al. 2007). Previous studies showed that the pervasiveness and persistence of online harassment may lead to long-lasting adverse psychological consequences in victims, such as suicidal behaviors, social difficulties, substance use and delinquency (Hinduja & Patchin 2010), harming the well-being of the victims and the society at large.

This emerging societal issue has begun to capture the attention of both researchers and practitioners (Lwin et al. 2012). Many social networking sites (SNSs) have also responded to the call to deter the spread of online harassment by launching online reporting systems on their platforms. Users can use these tools to report personal insults or harassment on SNSs to the review teams, who will then assess the reports based on the severity of the harassment and the statement of rights posted by the SNSs. Though prior research suggested that reporting incidents to relevant parties is an efficacious means to combat online harassment (Cassidy et al. 2013), little empirical research has been conducted to investigate the effectiveness of online reporting systems on SNSs, particularly from the user perspective.

Accordingly, the main objective of this study is to understand why SNS users are willing to use online reporting systems on SNSs to report harassment incidents. To the best of our knowledge, extant reporting literature mainly focuses on reporting of crime/violence to police (Bosick et al. 2012), or whistleblowing and peer-reporting in the organizational context (Lowry et al. 2013); there is a lack of theoretical insight into individuals' reporting behavior in the context of SNSs. In order to enrich our theoretical understanding of the emerging global issue of online harassment, we draw on social cognitive theory (Bandura 1977, 1997) to develop our research model and hypotheses explaining users' willingness to report online harassment on SNSs.

2 THEORETICAL FOUNDATION

Perception of efficacy is an important determinant of behavioral change (Bandura 1997). Bandura (1977, 1982) distinguishes between two different types of efficacy perceptions: perceived self-efficacy and perceived response efficacy. The validity of this distinction in decision making has been established empirically in a variety of research contexts, including information security, education, business, health, and wellness (See Bandura 1997 for a review; Gist & Mitchell 1992; Hocevar et al. 2014; Rhee et al. 2009).

Self-efficacy refers to individuals' perception of their own capabilities in performing actions at designated levels (Bandura 1997). It is an important concept in social cognitive theory, a framework for understanding, predicting and altering human behavior (Bandura 1977, 1986). Social cognitive theory is rooted in a view of human agency in which individuals are proactively engaged in their own cognitions to determine the outcomes of their actions (Bandura 1982). Individuals with a high level of self-efficacy have a stronger and more efficacious belief about their ability in executing a response approach. Self-efficacy is the most salient factor affecting individuals' behaviors when individuals face obstacles or threats.

Response efficacy refers to individuals' perception of that a response approach will result in desirable outcomes (Johnston & Warkentin 2010). This concept comes from self-efficacy theory (Bandura 1982), an important component of the social cognitive theory, which posits that individuals often cognitively analyze the potential outcomes of an adaptive response, and assess whether the response can lead to the specific outcomes if executed (Bandura 1982). Prior research suggests that response

efficacy is an important factor affecting individuals' choice of actions (Johnston & Warkentin 2010; Vance et al. 2012).

In information systems (IS) studies, the concept of efficacy has been extended to examine one's efficacy in using computers. For instance, computer self-efficacy (Compeau & Higgins 1995; Gist et al. 1989) has been examined to explain various end user computing behaviors, such as software or online learning (Gist et al. 1989; Pellas 2014; Potosky 2002), system adoption (Compeau & Higgins 1995; Eastin & LaRose 2000; Ellen et al. 1991; Venkatesh et al. 2003), SNS usage (Wang et al. 2015) and ethical computer usage (Kuo & Hsu 2001). This study extends the efficacy literature by examining it in the online reporting context. It explores potential factors affecting individuals' perception of efficacy and investigates how self-focused and system-focused efficacy perceptions impact individuals' willingness to utilize online reporting system to report harassment incidents on SNSs.

3 RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT

Figure 1 depicts our research model. We focused on the willingness to report as the dependent variable because prior IS empirical studies have overwhelmingly supported the strong positive association between intention and IS actual use (e.g., Davis 1989; Taylor & Todd 1995); retesting this association will not serve any purpose beyond validating the obvious well-established relationship (Bhattacharjee 2000). In this study, willingness to report refers to users' willingness to use the reporting system on SNSs to report aggressive content. Building on the theoretical foundation discussed above, we postulate that users' willingness to report is determined by their perception of self-efficacy and response efficacy. Perceived self-efficacy is influenced by users' general self-efficacy and social self-efficacy, whereas perceived response efficacy is affected by the perceptions of informational justice of the system and confidence in system anonymity.

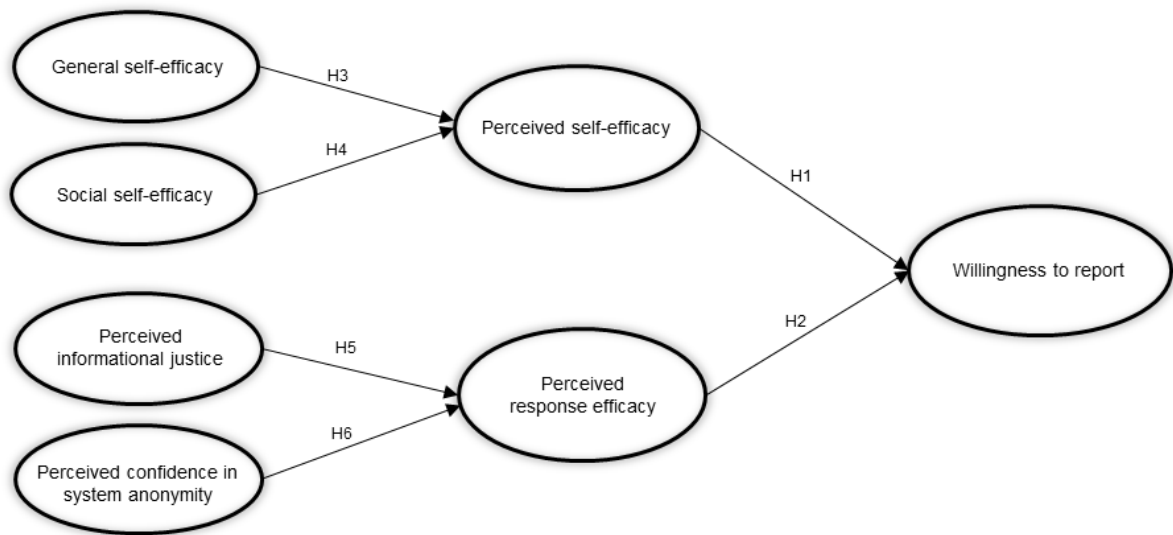


Figure 1. Research model

3.1 Perceived efficacy and willingness to report

In line with the efficacy literature (Bandura 1997), we postulate two dimensions of perceived efficacy, self-efficacy, and response efficacy, as the core factors influencing individuals' behavioral intention to use online reporting systems on SNSs.

3.1.1 Perceived self-efficacy and willingness to report

Perceived self-efficacy is defined as users' personal judgment of their ability to successfully perform the reporting acts using online reporting systems on SNSs. According to social cognitive theory, when individuals believe they have the capability (i.e., the required skills and resources) to carry out the desired action, they will undertake substantial efforts to accomplish that action (Bandura 1977). In the online context, when users believe that they are capable of using online reporting system to combat harassment on SNSs, they will be more willing to perform such reporting act. Previous studies have demonstrated the importance of perceived self-efficacy on users' intention to perform protective actions (Lee & Larsen 2009; Tu et al. 2015). We thus hypothesize:

Hypothesis 1: Perceived self-efficacy is positively associated with users' willingness to report harassment on SNSs by using online reporting system.

3.1.2 Perceived response efficacy and willingness to report

Besides cognitive assessment of self-efficacy, individual also consider the effectiveness of the desired action. *Perceived response efficacy* refers to the extent to which users believe that using the online reporting system would effectively tackle the problem of online harassment. According to social cognitive theory, individuals tend to consider how efficacious a response approach can address the problem at hand when determining whether to adopt the approach (Bandura 1982; Liang & Xue 2010; Workman et al. 2008). The higher the users' perception of response efficacy, the greater their likelihood of enacting the behavior (Bandura 1982; Lee & Larsen 2009). When afforded the online reporting system on SNSs, users will first assess the effectiveness of employing such tool to combat online harassment before deciding whether to use it for reporting the harassing incidents. Prior coping and technology adoption literature has demonstrated perceived response efficacy as a key determinant of usage intention (Lee & Larsen 2009; Liang & Xue 2010; Sheeran 2002; Taneja et al. 2014). We thus hypothesize:

Hypothesis 2: Perceived response efficacy is positively associated with users' willingness to report harassment on SNSs by using online reporting system.

3.2 General self-efficacy and Social self-efficacy

In social cognitive theory, the expectation of personal efficacy comes from two different sources: general self-efficacy and social self-efficacy (Bandura 1997; Bandura & Adams 1977; Thornberg & Jungert 2013), which provide the efficacy information needed for individuals to assess their own capabilities and confidence in executing desired actions.

General self-efficacy refers to individuals' global confidence in their coping ability across a wide range of situations (Pajares 1996; Tschannen-Moran et al. 1998). A broad and stable sense of personal competence, general self-efficacy is distinguishable from self-efficacy, which is relatively malleable and task-specific (Chen et al. 2004). According to social cognitive theory, individuals' general self-efficacy influences their perception of self-efficacy in carrying out desired actions (Bandura 1997). Prior bullying research has also found that general self-efficacy reinforces defenders' level of efficacy,

which in turn encourages intervention (Barchia & Bussey 2011; Gini et al. 2008; Pöyhönen et al. 2012). In the context of this study, we posit that individuals with higher level of general self-efficacy are apt to develop a higher level of confidence in their ability to execute the reporting acts using online reporting system.

Hypothesis 3: General self-efficacy is positively associated with users' perceived self-efficacy in reporting harassment on SNSs by using online reporting system.

Social self-efficacy refers to individuals' perception of their competence in executing the actions needed to manage interpersonal and social relationships (Bandura et al. 1999; Gini et al. 2008). Social cognitive theory postulates that individuals' self-efficacy will be enhanced or impaired by their efficacy belief in functioning appropriately in the social environment (Bandura 1997). Individuals with a high level of social self-efficacy tend to establish more supportive relationships, which in turn enhance the individuals' personal efficacy in coping with negative events, an example being harassments on SNSs (Fitzpatrick & Bussey 2014). Findings of prior studies also support the argument that confidence belief in interpersonal efficacy increases individuals' confidence in their ability to intervene with efficacious assertive actions (Gini et al. 2008). Therefore, we hypothesize that:

Hypothesis 4: Social self-efficacy is positively associated with users' perceived self-efficacy in reporting harassment on SNSs by using online reporting system.

3.3 Perceived informational justice and perceived confidence in system anonymity

According to social cognitive theory, the expectation of response efficacy influences behavioral change and is influenced individuals' perception of environmental contingencies (Kirsch 1985). In the context of this study, perceived environmental contingencies pertain to the assessment of the online reporting system. A review of prior reporting literature and IS literature reveals two salient sources of response efficacy: perceived informational justice and confidence in system anonymity (Lowry et al. 2013; Near & Miceli 1995; Taylor & Curtis 2013).

Perceived informational justice refers to the extent to which users perceive that the online reporting system provides accurate and quality explanation regarding the procedures in handling reports (Greenberg 1993). If an online reporting system is perceived to be open and truthful in communicating its procedural information, users will be more likely to develop the efficacy belief that using the system will effectively address the problem of online harassment on SNSs.

Perceived confidence in system anonymity refers to the extent to which users believe in the anonymity of the online reporting system (Pinsonneault & Heppel 1997). An online reporting system designed to process reports anonymously ensures that users are free from the potential threat of social evaluation and retaliation (Lowry et al. 2013; McKnight 2005; Park et al. 2008). Confidence in system anonymity is pivotal to users' perceived efficacy of their reporting responses; when users feel secure in depending on the online reporting system, they will be more likely perceive positive outcomes resulting from using the tool to report harassment on SNSs (Rains & Scott 2007). Prior studies on reporting have also suggested that perception about the anonymity of the reporting process enhances individuals' belief in the effectiveness of their reporting acts, which in turn motivates them to report stressful incidents to authority (Keil et al. 2010; Lowry et al. 2013). Therefore, we hypothesize that:

Hypothesis 5: Perceived informational justice is positively associated with users' perceived response efficacy in reporting harassment on SNSs by using online reporting system.

Hypothesis 6: Perceived confidence in system anonymity is positively associated with users' perceived response efficacy in reporting harassment on SNSs by using online reporting system.

4 RESEARCH METHODOLOGY

This study focuses on the factors affecting users' willingness to report online harassment in the social networking platforms. The proposed research model was tested with active Facebook users. The respondents were recruited from an online crowdsourcing platform, Amazon's Mechanical Turk (MTurk). MTurk allows registered users (called Workers) participate in tasks related to survey completion for remuneration (Ward & Broniarczyk 2011).

Construct	Item	Measurement Instrument
Perceived informational justice (Colquitt 2001)	PIJ1	Facebook reporting system has been candid in its action plan with me.
	PIJ2	Facebook reporting system has explained the procedures thoroughly.
	PIJ3	Facebook reporting system's explanations regarding the procedures are fair.
	PIJ4	Facebook reporting system has provided details in a timely manner.
Confidence in system anonymity (Pinsonneault & Heppel 1997)	CCS1	I believe the Facebook reporting system would not malfunction and identify me as the author of my reports.
	CCS2	I believe the Facebook reporting system would not be possible to identify me as the author of my reports
	CCS3	I believe that the Facebook reporting system would not attach a code to reports so that their author could be identified if needed.
	CCS4	I believe that no names would be attached to the harassment reports via the Facebook reporting system
	CCS5	I believe that my reports would not be identified in the Facebook reporting system to other Facebook community members.
General self-efficacy (Thornberg & Jungert 2013)	GSE1	If I saw harassment on Facebook, I am sure I would be able to stop it
	GSE2	I have a high confidence in my ability to intervene in harassment on Facebook
	GSE3	I have a high confidence in my ability to help the victim of harassment on Facebook
Social self-efficacy (Muris 2001)	SEE1	I can become friends with others
	SEE2	I can have a chat with an unfamiliar person
	SEE3	I can work in harmony with my classmates or colleagues
	SEE4	I can tell others that they are doing something that I don't like
	SEE5	I can succeed in staying friends with others
Perceived response efficacy (Pechmann et al. 2003)	REF1	Reporting harassment incidents through the Facebook reporting system is the best solution for counteracting problems caused by online harassment.
	REF2	If we report harassment incidents through the Facebook reporting system, we can minimize the threat of online harassment.
	REF3	Reporting harassment incidents through the Facebook reporting system is an effective way to combat online harassment.
Perceived self-efficacy (Lee & Larsen 2009)	SER1	I have the capability to use the Facebook reporting system to solve possible online harassment incidents
	SER2	I have the capability to use the Facebook reporting system to stop the online threatening messages
	SER3	I can perform the functions of the Facebook reporting system to report online harassment incidents
	SER4	I could use the Facebook reporting system if others got humiliated.
Willingness to report (Park et al. 2008)	WTR1	I am likely to go directly to report harassment incidents happening on Facebook through the Facebook reporting system
	WTR2	It is likely for me to report harassment incidents happening on Facebook through the Facebook reporting system

Table 1. Measurement items

All the measures were adapted from prior research with minor modification to fit the online context and with the specific focus on Facebook. Measurement of perceived confidence in system anonymity (e.g., I believe that my reports would not be identified in the Facebook reporting system to other Facebook members) (Pinsonneault & Heppel 1997), perceived informational justice (e.g. Facebook reporting system has explained the procedures thoroughly) (Colquitt 2001), general self-efficacy (e.g., I have a high confidence in my ability to intervene in harassment on Facebook) (Thornberg & Jungert 2013), social self-efficacy (e.g., I can succeed in staying friends with others) (Muris 2001), perceived self-efficacy (e.g., I have the capability to use Facebook reporting system to solve possible online harassment incidents) (Lee & Larsen 2009), perceived response efficacy (e.g., Reporting harassment incidents through the Facebook reporting system is an effective way to combat online harassment) (Pechmann et al. 2003), and willingness to report online harassment (e.g., I am likely to go directly to report harassment incidents happening on Facebook through Facebook reporting system) (Park et al. 2008). All the constructs were measured on a seven-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). Table 1 summarizes the measures of this study.

We used the Partial Least Squares (PLS, as implemented in SmartPLS 2.0.M3) to assess both the measurement model and the structural model of the proposed research model (Hair et al. 2014).

5 EXPECTED CONTRIBUTIONS AND CONCLUSIONS

In this study, we aim to study individuals' willingness to report online harassment through the online reporting system on SNSs, with an investigation of the perception of efficacy, and the factors strengthen the formation of perception of efficacy.

Our study seeks to contribute to both research and practice. First, we provided an initial step toward extending the view of efficacy into a new domain of online reporting system by including the relevant efficacy predictors. This study which is one of the few attempts to investigate individuals' reporting intention in the context of SNSs and the finding of our study is vital for understanding the reporting mechanism in the individual level. In addition, we present new insights to prior reporting studies by extending the theoretical lens of perceptions of efficacy to the context of individuals' online reporting decision. Second, we developed a research model to explain individuals' willingness to report in the social networking platform, which is in response to the call for the theoretical and empirical evaluation of anti-online harassment strategies. The results of this study are expected to contribute to practitioners. Particularly, it gives insights to both SNS providers in encouraging users to use their online reporting systems for curbing online harassment and the related organization or government agencies in strengthening individuals' belief about their self and social efficacy in coping with the aversive events.

Along with the contributions of this paper, important limitations should be noted. In this study, we only focused on the U.S. sample and tested the model with active Facebook users. Future study should extrapolate the findings to other samples, cultures and across various social networking platforms so as to gain a better understanding of this important phenomenon.

To conclude, online harassment has been an important universal phenomenon that potentially places users of SNSs at great risk. We believe that the nuanced research model in this study can serve as a foundation for these potential studies on online harassment and online reporting system.

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