

Contribution of Mindfulness to Individuals' Tendency to Believe and Share Social Media Content

Peerayuth Charoensukmongkol, National Institute of Development Administration, Bangkok, Thailand

ABSTRACT

The objective of this research was to explore the effect of mindfulness on individuals' tendencies to believe social media content and share it without realizing the potential consequences. The sample used in this study comprised 300 participants in Bangkok, Thailand, of whom 157 were full-time employees and 143 were college students. Results from partial least squares regression analysis supports the hypothesis that individuals who exhibit higher levels of mindfulness tend to be skeptical of the validity of information to which they are exposed. In addition, skepticism is linked to a decreased tendency to believe social media content and to share content on social media. The findings further support a direct link between mindfulness and a decreased tendency to share social media content. Overall, these findings confirm the positive contribution of mindfulness as a quality that may allow individuals to question the validity of social media content before they decide to believe it and share it with others.

KEYWORDS:

Information Diffusion, Mindfulness, PLS Model, Skepticism, Social Media

1. INTRODUCTION

The term social media has been widely defined in literature as "Internet-based services that allow individuals to create, share and seek content, as well as to communicate and collaborate with each other" (Lee & Ma, 2012, p. 332). It is evident that social media have begun to replace traditional media, such as television and newspapers (Kaplan & Haenlein, 2010). Currently, people tend to rely heavily on social media, such as Twitter and Facebook, to gain access to news and information (Talcoth, 2015). Advances in smartphone technology also provide access to news and information from anywhere through mobile social media applications. Information posted on social media often disperses rapidly across geographic boundaries (Suh et al, 2010). These platforms not only allow individuals to obtain a wide coverage of information faster and easier than traditional media do, but also facilitate information sharing among members (Li et al, 2014). In contrast to traditional media where individuals passively receive information provided by content editors, social media promote the active participation of users in producing content, thereby empowering people (Lee & Ma, 2012).

Despite the benefits of social media, which significantly facilitate information diffusion, problems can arise when people increase their reliance on these applications for information consumption without questioning the accuracy of the content (Carlos et al, 2013; Gundecha & Liu, 2012). In addition, some users share posts with others without considering the potential consequences of sharing invalid or distorted information. Literature has shown that rumors tend to be pervasive in social

media (Diakopoulos et al, 2012; Mendoza et al, 2010; Ratkiewicz et al, 2011). According to Oh et al (2010), a major criticism of social media is that they can be used for propagating misinformation, rumors, and, in extreme cases, propaganda. Similarly, they can be used as channels for spreading biased information, tribal prejudices, and hate speech (Mäkinen & Wangu Kuira, 2008). The viral spreading of political misinformation in social media is one example of social media abuse (Ratkiewicz et al, 2011). Furthermore, hoaxes, such as Hollywood rumors, tend to spread via social media from time to time (Dewey, 2014). Given the negative effects of overreliance on social media for news and information and the tendency to share misinformation on social media, which can cause suspicion and fear among the public (Chen et al, 2015; Oh et al, 2010; Stieglitz & Dang-Xuan, 2013), it is important to understand some of people's personal characteristics that explain these social media behaviors. Gaining this body of knowledge is crucial because it can offer some recommendations to help prevent this behavioral tendency. In practice, it is generally difficult and somehow controversial for policy makers to resort to legal actions to strictly monitor and control contents that citizens post and share on social media (Sakawee, 2013). However, if policy makers understand some key personal characteristics that can restrain such behavior and are able to provide proper intervention or campaign to promote these characteristics, this can serve as a more effective solution to reduce the spread of misinformation in society.

In particular, this study focuses on the role of mindfulness, which is defined as a state of bringing a certain quality of attention to moment-by-moment experiences (Kabat-Zinn, 1990). The concept of mindfulness, which originates from the practice of meditation, has been applied extensively in the fields of clinical study, psychology, and management over the past decade (Gärtner, 2013; Shonin et al, 2014; Zhang et al, 2013). However, little is known about its benefits in use of technology, particularly with regard to behaviors concerning the use of social media. Although the benefits of mindfulness during use of social media were previously proposed (Deschene, 2011), its contribution has not been empirically tested in academic research. The main reason mindfulness is the focus of the study is that research extensively supports that it is a characteristic that significantly helps individuals reduce a wide array of unhealthy behaviors that result from uncontrolled emotions and impulses (Hafenbrack et al, 2013; Shonin et al, 2014). Given some empirical evidence that shows that the tendency to share contents on social media is also significantly driven by emotions (Oh et al, 2010; Stieglitz & Dang-Xuan, 2013), the quality of mindfulness might be an important personal characteristic that can tackle social media behaviors.

Because the main goal of mindfulness is to cultivate awareness of internal and external stimuli that individuals experience moment-to-moment (Brown & Ryan, 2003), the objective of this research was to explore whether the degree of mindfulness individuals exhibit explains the tendency to believe information posted on social media platforms without questioning content validity and to share content without considering the consequences of doing so. Because mindful individuals typically are constantly aware of their thoughts, feelings, and actions, this research postulates that mindfulness may make individuals aware of the accuracy of social media information before they believe it or decide to share it.

2. BACKGROUND AND HYPOTHESES

2.1. Information Sharing on Social Media

Individuals not only post personal information on social media, but also re-share information their friends posted. Today, many leading social media Web sites make it easy to share content in just one click. On the positive side, this sharing feature speeds the diffusion of information, thus allowing

people to gain access to major news and events that happen in their communities or around the world faster than they would when using traditional media. In addition, social media can serve as an alternative channel for citizen communication and participatory journalism when traditional media are inaccessible (Mäkinen & Wangu Kuira, 2008).

However, given the growing number of people increasing their reliance on social media to consume news and information, the accuracy and trustworthiness of information shared on social media platforms is the main issue individuals need to consider. Overreliance on news or information from social media without questioning the validity of the content can be harmful to people and society, particularly when individuals decide to share content that lacks validity or is simply a rumor or hoax. The danger of careless sharing is that the shared content not only exist between members of the sharer's social media group, but also can be re-shared to other social media groups, rapidly multiplying as an increasing number of people in different groups share the content. In this regard, information shared by one person can spread nationwide or even worldwide in a short time.

Generally, any social media user can generate unverified information, which can be either true or false (Aula, 2010). Literature has shown that rumors and hoaxes spread through social media Web sites are extremely common (Diakopoulos et al, 2012; Oh et al, 2010; Ratkiewicz et al, 2011). Rumors can gradually obtain credibility as a growing number of users acquire and re-share them, and these rumors can be harmful under some circumstances. For example, Oh et al (2010) indicate that misinformation spread on Twitter during the 2010 Haiti earthquake increased anxiety and caused informational ambiguity for communities during the crisis. Similarly, Mendoza et al (2010) report that false rumors spread quickly on Twitter during the 2010 earthquake in Chile, contributing to general chaos in the absence of first-hand information from traditional sources.

Given the potential negative effects of information sharing on social media, understanding people's motivations for sharing social media content is a major focus of current research. For example, scholars argue that sharing news on social media enhances personal status within the social media community (Burke et al, 2009; Lee & Ma, 2012; Lin, 1999). Stieglitz and Dang-Xuan (2013) found that people who have positive sentiments towards Twitter messages tend to retweet more frequently and quickly compared to people who had neutral sentiments. Other scholars focused on how the content characteristics of social media information influence content sharing (Nagarajan et al, 2010; Suh et al, 2010). It can be expected that individuals' perceptions about the believability of content should be a fundamental motivator for sharing the content. Simply put, when individuals perceive that the content is true (although it may be false in reality), they are more likely to share it without hesitation. Therefore:

Hypothesis 1: Individuals who believe in the validity of content posted on social media have a greater tendency to share this content.

2.2. Mindfulness and Social Media Behaviors

In this study, mindfulness is proposed as a personal characteristic that can regulate individuals' tendencies to believe social media content without taking into account its validity and to share content without considering the consequences. In literature, mindfulness is conceptualized as a psychological state and a personality trait (Dane, 2011). According to Leroy et al (2013, p. 27), mindfulness represents one's ability to "bring one's complete attention to the experiences occurring in the present moment, in a nonjudgmental or accepting way." This definition suggests that mindfulness comprises two main characteristics, namely self-awareness and nonjudgmental evaluation of stimuli. First, mindful individuals are inclined to be aware of internal stimuli, such as thoughts and feelings, and external stimuli, such as objects and their environment, moment-to-moment. Simply put, mindful individuals tend to be aware of what they are thinking, feeling, doing, perceiving, or experiencing now.

Another characteristic of mindfulness, nonjudgmental evaluation of stimuli, makes individuals acknowledge any thoughts, feelings, or sensations they experience from stimuli without labeling them as favorable or unfavorable experiences. In other words, they avoid seeing things through their own filters. A combination of attentiveness and non-judgmental evaluation of stimuli allows individuals to avoid the habitual and routine interpretation of stimuli and information. According to Reb et al (2012), mindful individuals typically perceive and process stimuli and information in a more creative and differentiated manner, thereby allowing the creation and refinement of categories, connections, and perspectives. In research, mindfulness was found to promote a variety of psychological wellbeing (Brown & Ryan, 2003; Shonin et al, 2014), improve decision making (Gärtner, 2013; Hafenbrack et al, 2013), and enhance performance outcomes (Glomb et al, 2011; Zhang et al, 2013). Mindfulness was used recently to explain the effects of social media use behaviors. For example, Charoensukmongkol (2015) asserts that being mindful when using social media is important to help individuals to obtain benefits from using social media while preventing some negative consequences that may occur from social media misuse. In the next section, the author discusses in detail how mindfulness influences social media behaviors.

The researcher proposes that being attentive to one's internal stimuli and behaviors in the moment while maintaining non-judgmental evaluation are important characteristics of mindfulness that prevent people from acting without thought or on impulse, which may lead to negative consequences when using social media. In this regard, Wells (2005, p. 337) asserts that mindfulness "can be equated with effortful attentional processing and is seen as the opposite of mindlessness, a state of automatic processing." When individuals are not mindful when receiving information from social media, they can make hasty judgments to believe the content they see and re-share it without thinking. Being mindful of one's thoughts, emotions, and actions not only raises awareness of the accuracy of information before a person decides to believe it, but also makes one appreciate some of the consequences that may arise from sharing the information before doing so. For example, before deciding to share content, mindful individuals may stop to consider whether the content is valid and reliable or can harm themselves and others after they share it. The opposite of this action is mindless sharing, which happens when individuals simply share content without comprehending what they are doing.

Moreover, being aware of one's own social media behaviors while maintaining non-judgmental evaluation of the social media experience prevents a person from being affected by favorable or unfavorable sentiments when exposed to content that seems believable or to share content impulsively (Charoensukmongkol, 2015). For example, the careless sharing of rumors on Twitter and Facebook about the spread of Ebola infection across the United States caused tremendous fear and anxiety in many states. People exposed to that type of content may believe in it quickly and share it right away due to fear and their concern for others. Because evidence supports that emotions can affect social media sharing significantly (Stieglitz & Dang-Xuan, 2013), being mindful prevents individuals from being influenced by their feelings about information that may persuade them to share the content carelessly and without regard for content validity and the consequences of sharing. Therefore:

Hypothesis 2: There is a negative relationship between degree of mindfulness and individuals' tendency to believe content posted on social media.

Hypothesis 3: There is a negative relationship between degree of mindfulness and individuals' tendency to share content posted on social media.

In addition to the direct contribution of mindfulness, the researcher further proposes that individuals who exhibit high levels of mindfulness are more likely to develop some degree of skepticism, which, in turn, causes them to question the accuracy of social media content before they decide to believe or share it. Generally, skeptics do not easily believe any information to which they are exposed until they have researched it or obtained solid evidence to support the validity of the information (Glick et al, 1989). In fact, skepticism can benefit information processing because

it facilitates the development of critical thinking abilities. Because of these characteristics, skeptics spend more time reasoning; consequently, this helps them to make fewer errors in decision making (Pennycook et al, 2013). Therefore, without sound and adequate evidence to affirm that information on social media can be trusted, it is difficult for these people to believe the information.

Because a number of studies have shown that mindfulness can improve the quality of decision making and information-processing capabilities (Gärtner, 2013; Hafenbrack et al, 2013), a linkage between mindfulness and skepticism can be expected. In particular, research suggests that mindfulness represents the quality of the metacognitive capability individuals exhibit (Bishop et al, 2004; Wells, 2002, 2005). For example, Bishop et al (2004) asserted that mindfulness can be considered a metacognitive skill as it allows individuals to effectively control cognitive process and to monitor stream of consciousness. Metacognition is the higher cognitive capability that helps individuals effectively monitor and control their own thought processes (Flavell, 1979). First, individuals with this capability typically have cognitive flexibility, constantly question the accuracy of their preexisting knowledge whenever they encounter new information, and are willing to adjust their preexisting knowledge when it is proven to be inaccurate (Thomas, 2006). Second, cognitive complexity is another characteristic that supports the capability to process information more profoundly (Garofalo & Lester, 1985; Mevarech, 1999). For example, a study by Brown and Krishna (2004) provides evidence that metacognition makes consumers more skeptical about marketing schemes. Considered this evidence, the characteristics mindful individuals with metacognitive capabilities exhibit may make them more likely to have reservations about social media information. Instead of quickly concluding information is true, these people may pause to question and evaluate the legitimacy of the information (Brown & Krishna, 2004). As a result, they typically withhold the decision to believe or re-share the content until they can be confident or obtain additional proof from other sources to support the validity of the information (Gärtner, 2013; Karelaia & Reb, 2014). Therefore:

Hypothesis 4: A positive relationship exists between level of mindfulness and the degree of skepticism an individual exhibits.

Hypothesis 5: Degree of skepticism negatively affects an individual's tendency to believe content posted on social media.

Hypothesis 6: Degree of skepticism negatively influences an individual's tendency to share content posted on social media.

3. METHODS

3.1. Samples and Data Collection

The sample used in this study comprised 300 participants in Bangkok, Thailand, of whom 157 were full-time employees and 143 were college students. The employee sample was selected from two leading corporations, whereas the student sample was obtained from one private university. A self-administered questionnaire survey was developed to collect data, and respondents were informed that participation in the study was voluntary and anonymous. For respondents who were full-time employees, questionnaires and cover letters were distributed in person, and completed questionnaires were collected in person within one week. For respondents who were college students, a research assistant distributed questionnaires to a random selection of students on campus. After students completed the questionnaires, they returned them to a research assistant on the same day. Table 1 summarizes the characteristics of the sample.

3.2. Measures

Mindfulness was measured by the mindfulness attention and awareness scale (MAAS) developed by Brown and Ryan (2003), which is a fifteen-question scale widely used in research to measure trait

Table 1. Demographic characteristics of the sample

Age	Under 18 years: 48 (16%) 18-25 years: 128 (42.7%) 26-33 years: 61 (20.3%) 34-41 years: 33 (11%) 42-49 years: 25 (8.3%) 50 years or over: 5 (1.7%)
Gender	Male: 128 (42.7%) Female: 172 (57.3%)
Education	Below bachelor's degree: 97 (32.2%) Bachelor's degree: 163 (54.3%) Master's degree or higher: 40 (13.3%)
Occupation	Student: 143 (47.6%) Full-time employee: 157 (52.4%)
Social media use intensity (measured as the percentage of total leisure time)	Less than 10 percent: 16 (5.3%) 10-20 percent: 27 (9%) 21-30 percent: 47 (15.7%) 31-40 percent: 36 (12%) 41-50 percent: 66 (22%) More than 50 percent: 108 (36%)
Major source of news and information	Mostly from other media: 40 (13.3%) From social media and other media equally 126 (42%) Mostly from social media: 134 (44.7%)

mindfulness. Sample items include “I could be experiencing some emotion and not be conscious of it until sometime later” and “I break or spill things because of carelessness, not paying attention, or thinking of something else.” All questions in the original scale were scored on five-point Likert items, ranging from 5 (almost always) to 1 (almost never). Subsequently, the scores were reversed to make low scores represent low levels of mindfulness and high scores represent high levels of mindfulness.

The researcher developed the measures for the tendency to believe social media content, the tendency to share social media content, and skepticism. The tendency to believe social media content was measured by four questions that required respondents to assess to what extent they generally thought content posted or shared by others on social media could be trusted. The tendency to share social media content was measured by four questions that requested respondents to assess the extent to which they thought sharing content posted or shared by others on social media would not cause any negative consequences. Skepticism was measured in terms of the likelihood that respondents would normally question the validity of information to which they are exposed daily before believing it. This construct was measured by three questions. All questions that measured these three constructs were rated on five-point Likert items ranging from 1 (strongly disagree) to 5 (strongly agree). The appendix contains the questions employed in data collection.

In addition, control variables that can affect the dependent variables were incorporated in the analysis. These include age, education, gender, collectivistic attitude, social media use intensity, and the degree to which respondents access other media, such as television and newspapers. Generally, younger people typically are less mature and more likely to believe and share social media content (Correa et al, 2010). Those with higher levels of education are more knowledgeable, with more developed critical thinking skills (Pithers & Soden, 2000), so they are more skeptical of social media information and are less likely to share it carelessly in comparison to their less educated counterparts. Moreover, females tend to emphasize social relationships more than males do (Pujazon-Zazik & Park, 2010), which increases the possibility that they believe the content shared and are more prone to

share it with others (Chen et al, 2015). Age and education were measured on an ordinal scale, while gender was measured on a nominal scale.

Collectivistic attitude was considered as a control variable because collectivists are usually strongly connected to their social group; thus, they might easily believe the content their friends post and are more prone to share it with others (Singelis et al, 1995). Collectivistic attitude was measured by the scale developed by Singelis et al (1995). For social media use intensity, it is likely that individuals who experience greater exposure to social media content are more inclined to believe and share it (Lee & Ma, 2012). This variable was measured on an ordinal scale by asking respondents to estimate what percentage of their leisure time they spend using social media. Finally, the degree of access to other media was included as a control variable because information obtained from multiple sources can facilitate verification (Tran, 2013). This variable was measured on an ordinal scale by asking respondents to rate the degree to which they access news and information via traditional rather than social media.

3.3. Statistical Analysis

Partial least squares (PLS) regression was used to analyze the data. PLS combines principal component analysis, path analysis, and a set of regressions to generate estimates of the standardized regression coefficients for the model's paths and factor loadings for the measurement items (Chin & Newsted, 1999). PLS provides greater flexibility than other structural equation modeling (SEM) techniques because it does not require data to be normally distributed and requires a smaller sample size (Kline, 2005). PLS was suitable for this study because the results from the Shapiro-Wilk test indicated that all main constructs proposed in the hypotheses are not distributed normally. PLS estimation was performed using WarpPLS version 4.0.

4. RESULTS

4.1. Construct Validity and Reliability

Before the PLS model was assessed, a series of analyses was performed. First, the researcher determined the convergence validity and discriminant validity of all reflective constructs including mindfulness, the tendency to believe social media content, the tendency to share social media content, skepticism, and collectivistic attitude. Convergence validity was assessed using factor loadings, which need to be greater than .5 to support adequate convergence validity (Hair et al, 2009). Two items related to the mindfulness construct fail to meet the minimum requirement; therefore, they were removed from the analysis. Factor loadings of other reflective constructs are above this threshold. Discriminant validity was assessed by comparing the average variance extracted (AVE) to the squared correlation coefficient. According to Fornell and Larcker (1981), the square root of the AVE must be greater than the correlations between the constructs for discriminant validity to exist. Table 2 shows that all AVEs meet this requirement. Second, the researcher examined construct reliability by evaluating the Cronbach's alpha coefficient and composite reliability coefficient. For the constructs' reliability to be satisfactory, these two coefficients should be higher than .7 (Nunnally, 1978). The results in Table 2 indicate that most reflective constructs have coefficients that meet the minimum requirement. However, the construct that measures the tendency to share content on social media has a Cronbach's alpha coefficient of .65, which is still acceptable.

Square roots of average variance extracted from latent variables are shown in parentheses;

SMS=tendency to share information posted on social media websites, AM=degree of access to other media, SMUI=social media use intensity,
MALE=male dummy variable, AGE=age, EDU=education, MFN=mindfulness, SKPT=skepticism,
COL=collectivistic attitude,

Table 2. Correlation between variables and square root of average variance extracted

Variable	Composite reliability coefficients	Cronbach's alpha coefficients	SMS	AM	SMUI	MALE	AGE	EDU	MFN	SKPT	COL	SMB
SMS	.789	.65	(.699)									
AM	-	-	-.018	(1)								
SMUI	-	-	.235**	-.399**	(1)							
MALE	-	-	.055	-.127*	.098	(1)						
AGE	-	-	-.22**	-.051	-.176**	.02	(1)					
EDU	-	-	-.269**	-.141*	.045	-.033	.54**	(1)				
MFN	.84	.804	-.209**	.053	-.179**	.01	.276**	.179**	(.547)			
SKPT	.877	.789	-.256**	-.111	-.062	-.038	.37**	.498**	.188**	(.839)		
COL	.87	.815	.006	-.173**	.105	-.044	.121*	.355**	.002	.469**	(.757)	
SMB	.815	.804	.31**	-.318**	.365**	.069	-.144*	-.162**	-.112	-.165**	-.052	(.724)

Notes:** p<.01; * p<.05;

SMB=tendency to believe information

4.2. Multicollinearity and Common Method Bias

Multicollinearity between latent variables was evaluated using full variance inflation factor (VIF) statistics. Petter et al (2007) recommended that full VIF should be lower than 3.3 to confirm that multicollinearity is not a serious issue. The results indicate that the maximum full VIF is 1.866, which is lower than the maximum threshold. Furthermore, Kock and Lynn (2012) argue that the full collinearity test can serve as a technique that captures the possibility of common method bias (CMB) in the PLS model analysis. They propose that full collinearity VIF lower than the critical value of 3.3 can provide some evidence that CMB may not be a major threat for the analysis.

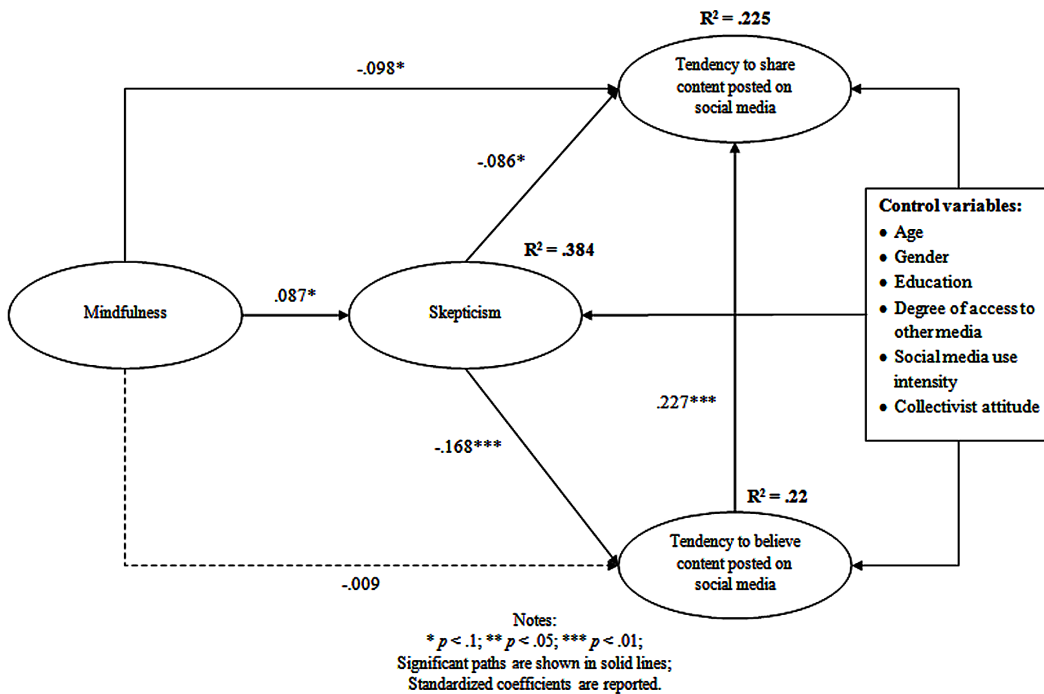
4.3. Social Desirability Bias

Because self-reported measures were used in data collection, the social desirability bias (SDB) test is required to assess whether the respondents answered the survey questions truthfully or misrepresented themselves in order to manage their self-presentation (Crowne & Marlowe, 1960). SDB was detected by using the recommendation suggested by Barger (2002). SDB scale items were developed by the author to make them applicable to Thai culture. Respondents were asked to indicate whether they have ever engaged in ten aspects of activities that seem to be socially undesirable in Thai culture, but people tend to display in normal life (e.g., displaying selfishness, having dirty thoughts, telling lie, gossiping, swearing, covering up wrongdoings, stealing, breaking rules, littering, and blaming others). The response was coded '1' if a respondent reported that they have never engaged in an activity; and was coded '0' otherwise. These scores are intended to measure how likely the respondent is to give answers that sound good instead of answers that are true (Crowne & Marlowe, 1960). The total SDB scores were then correlated with four outcome variables in the model. According to Barger (2002), if the answers to the question are not related to respondents' SDB scores, the correlation coefficient should be near 0. The results show that the SDB variable weakly correlates with mindfulness (r=-.065; p=.249), the tendency to believe social media content (r=.045; p=.438), the tendency to share social media content (r=.097; p=.095), and skepticism (r=-.038; p=.516). These findings mitigate the concern that SDB bias the key measures.

4.4. Hypothesis Testing

Results from PLS analysis are summarized in Figure 1. All control variables were included together in the model. Standardized path coefficients and p-values are reported. All fit indices of the PLS

Figure 1. PLS results



model, including the average path coefficient (APC=.126; $p=.003$), average r-squared (ARS=.276; $p<.001$), average full collinearity (AFVIF=1.413), Sympon’s paradox ratio (SPR=.792), r-square contribution ratio (RSCR=.991), and statistical suppression ratio (SSR=.875) are satisfactory.

Hypothesis 1 predicts that individuals who believe information posted on social media typically have a greater tendency to share information posted on social media, and the result statistically supports this hypothesis ($\beta=.227$; $p<.001$). Hypothesis 2 predicts a negative relationship between mindfulness and individuals’ tendency to believe information posted on social media. Although the result shows that these two constructs negatively associate, it is not statistically supported ($\beta=-.009$; $p=.429$). Hypothesis 3 predicts a negative relationship between mindfulness and individuals’ tendency to share information posted on social media, and the result statistically supports this hypothesis ($\beta=-.098$; $p=.024$). Hypothesis 4 predicts a positive relationship between the level of mindfulness and the degree of skepticism; the result statistically confirms this hypothesis ($\beta=.087$; $p=.039$). Hypothesis 5 predicts a negative association between the degree of skepticism and individuals’ tendency to believe information posted on social media, which is statistically supported by the result ($\beta=-.086$; $p=.042$). Finally, hypothesis 6 predicts a negative association between degree of skepticism and individuals’ tendency to share information posted on social media without considering the consequences. The result also statistically supports this hypothesis ($\beta=-.168$; $p<.001$).

The relationships between control variables and each dependent variable are as follows. The tendency to believe social media content positively associates with social media use intensity ($\beta=.278$; $p<.001$) and age ($\beta=.014$; $p=.391$); but it negatively associates with education ($\beta=-.169$; $p<.001$), the degree to which individuals access media ($\beta=-.239$; $p<.001$), male dummy variable ($\beta=-.002$; $p=.486$), and collectivistic attitudes ($\beta=-.029$; $p=.275$). The tendency to share social media content positively associates with social media use intensity ($\beta=.158$; $p<.001$), the degree to which individuals access other media ($\beta=.118$; $p=.009$), collectivistic attitudes ($\beta=.165$; $p<.001$), male dummy variable ($\beta=.036$; $p=.236$), and age ($\beta=.018$; $p=.357$); however, it negatively associates with education ($\beta=-.199$; $p<.001$). Finally, skepticism was found to associate positively with age ($\beta=.134$;

$p=.003$), education ($\beta=.280$; $p<.001$), and collectivistic attitude ($\beta=.354$; $p<.001$); but negatively with social media use intensity ($\beta=-.089$; $p=.036$), the degree to which individuals access media ($\beta=-.045$; $p=.179$), and male dummy variable ($\beta=-.014$; $p=.387$).

5. DISCUSSION

5.1. General Discussion

The objective of this research was to explore the effect of mindfulness on individuals' tendency to believe social media content and share it without realizing the potential consequences. The demographic characteristics and other social media behaviors of the respondents were controlled, and the results support the hypothesis that those who believe a social media content are more likely to share it. This finding is consistent with the argument that suggests that individuals' perceptions of the believability of a content can be an influential factor that leads to content sharing (Nagarajan et al, 2010; Suh et al, 2010). The more individuals feel positive about a content, the higher the tendency they will share it (Stieglitz & Dang-Xuan, 2013). Moreover, the analysis supports the hypothesis that individuals who exhibit higher levels of mindfulness tend to be skeptical of the validity of information to which they are exposed. This finding supports the role of mindfulness proposed in prior research as a characteristic that helps individuals enhance information processing capabilities (Bishop et al, 2004; Wells, 2002). It is also consistent with the results of a study that suggest that mindful individuals tend to constantly question the accuracy of information (Thomas, 2006). In addition, skepticism is found to be linked to a decreased tendency to believe social media content and share it on social media. The findings further support a direct link between mindfulness and a decreased tendency to share social media content. This is also consistent with the findings of a prior research that suggest that skeptics tend to spend more time reasoning out to avoid making errors in their decision making (Pennycook et al, 2013). Although the hypothesis regarding the direct link between mindfulness and tendency to believe social media content is not supported, it can be explained that a skeptic attitude associated with mindfulness may serve as a mechanism that makes individuals not easily believe in a social media content. Overall, these findings confirm the positive contribution of mindfulness as a quality that may allow individuals to question the validity of a social media content before they decide to believe it and share it with others.

Because the role of mindfulness in social media behaviors has not been widely investigated in literature, results from this research offer additional evidence that supports the importance of mindfulness in determining the degree to which users evaluate information on social media before they decide to share it. Specifically, results from this research are consistent with the findings of a study conducted by Charoensukmongkol (2015), which emphasizes the role of mindfulness in helping individuals regulate their social media behaviors to avoid negative consequences that may arise through mindless use. It has been shown in the present study that mindful individuals are generally more likely to evaluate the validity of social media content before they decide to trust and share information. Moreover, this research contributes to existing research regarding factors that motivate individuals to share social media content (Lee & Ma, 2012; Nagarajan et al, 2010; Stieglitz & Dang-Xuan, 2013; Suh et al, 2010). While existing research focuses on personal motivations, social factors, and content characteristics, this study suggests that mindfulness should be another key characteristic that needs to be considered when studying social media use behaviors. Specifically, evidence about the contribution of mindfulness is closely congruent with prior studies that support the influential role of emotions (e.g. fear, anxiety) that can trigger a social media sharing behavior (Chen et al, 2015; Oh et al, 2010; Stieglitz & Dang-Xuan, 2013). Considering the role of mindfulness that helps individuals effectively regulate their own emotions and prevent them from engaging in impulsive behaviors like in the case of careless social media sharing, the present study extends these prior studies by adding

that being mindful when exposed to a social media content can be an essential characteristic that can help prevent this behavioral tendency.

5.2. Limitations and Suggestions for Future Research

Although most of the hypotheses are supported, the study contains several limitations that need to be considered. First, the data do not capture the types of social media content to which the respondents typically are exposed or share. Sharing general content, such as news and entertainment, from well-known sources may not cause harmful consequences compared to sharing sensitive content from unknown sources. For the former, believing or sharing the content may not be a serious matter because individuals can verify it easily. Additionally, the study did not consider the possibility that individuals may be inclined to believe content shared by a trusted person although the original source of that content may be unidentified. Given these gaps in the study, future research needs to focus on specific content that makes careless sharing on social media platforms a critical issue, and should consider the role of the trustworthiness of the person who shared the content and may influence others to believe or to re-share it.

Second, the results were interpreted from cross-sectional data, thereby making the causality between key variables difficult to confirm. Third, the data were collected from respondents from three institutions in Bangkok; thus, the results cannot be generalized to an entire population. Future research that collects data in a broader scope is required to generalize the findings. Nevertheless, given the scant amount of research currently published that tests the role of mindfulness in social media behaviors, future research may replicate the study in different cultural contexts to explore whether the effects of mindfulness on social media behaviors are similar in different cultures. In addition, future studies may consider some culture-specific factors or cultural values that possibly moderate the role of mindfulness on social media behaviors.

5.3. Practical Implications

Based on the overall findings, this research provides some solutions that could mitigate the potential problems caused by the careless sharing of information on social media platforms. Given the power of social media technology to disperse information rapidly across geographical areas, it is crucial for individuals to consider validity before they decide to trust or share content. When people carelessly share false information on social media, it creates rumors that quickly become pervasive. Although people may not perceive the information as harmful, in some circumstances it can be ambiguous and cause anxiety. Thus, the researcher recommends that individuals be mindful when accessing information via social media. Being mindful in this sense can help raise awareness and promote skepticism about the legitimacy of social media content. When people are mindful about the accuracy of information, they do not allow their emotions to influence their judgment about its reliability (Stieglitz & Dang-Xuan, 2013) until they can obtain evidence to support the trustworthiness of the information. This approach supports the careful evaluation of information to determine its trustworthiness before sharing it. Being mindful with using social media is especially important when people rely extensively on social media to receive news and information. As indicated by the data, the majority of respondents reported that they not only spent more than half of their leisure time on social media, but also that they relied more heavily on social media than traditional media as a source of news and information. Without carefully evaluating the validity of social media content, people are highly susceptible to embracing false information spread on social media platforms.

The overall findings also offer policy implications to reduce the spread of rumors and misinformation in society caused by careless social media sharing. As mentioned previously, policy makers experience difficulty in resorting to legal actions to regulate and control social media contents, so they will have to provide appropriate interventions that target some personal characteristics that influence such behaviors. Given the role of mindfulness that negatively relates with the aforementioned behavioral tendency, a policy maker may need to initiate a campaign to educate and encourage their

citizens to be mindful when they are exposed to social media information. In Thailand, for example, the government and the press have continuously communicated to the public to encourage the citizens to exercise mindfulness before they believe, share, or reshare social media contents (Doman, 2015; Raksaseri, 2015). While some scholars propose that individuals differ inherently in the quality of their mindfulness, it has been proven that one's state of mindfulness can be enhanced with proper training (Wells, 2005). When individuals are trained adequately to cultivate their state of mindfulness, self-regulation abilities usually improve, thereby helping them to be less prone to processing information and performing tasks on autopilot. This allows them to evaluate social media contents effectively and to regulate behaviors concerning the use of social media to avoid problems that arise from careless content sharing.

In addition to the implications obtained from the hypotheses testing, some significant effects of the control variables provide further implications. First, the result indicating that respondents with higher education not only exhibited more skepticism but also showed a lower tendency to believe and share social media contents suggests the crucial role of education, which can help individuals develop their critical thinking skills, which can make them more cautious before they believe information from social media. This finding suggests that policy makers need to provide proper education to the citizens to make them be aware of the accuracy of a social media content before they believe it, and make them realize the negative consequences of carelessly sharing content. In addition, the results that indicate that older respondents tend to exhibit more skepticism than younger respondents do imply the essential role of mental maturity, which facilitates rational information processing. Because younger adults and teenagers are more prone to believing information they are exposed to without being skeptic about their accuracy and trustworthiness, it is important for policy makers to focus more on this group of citizens and educate and persuade them to evaluate information from social media critically. Lastly, the results indicating that respondents with collectivistic values tended to report a higher tendency to share social media contents also provide a useful implication. Generally, people with strong collectivistic values tend to share social media contents because they believe that doing so will benefit their social group (Singelis et al, 1995). However, if they realize that sharing inaccurate information on social media can be harmful to society, they might refrain from doing so. Therefore, if policy makers effectively inform this group of people about the harmful effects of careless sharing, this behavioral tendency can be reduced.

6. CONCLUSION

It is critical for individuals to evaluate the accuracy of information before they believe or share it. Once information is shared and then reshared by others on social media, it cannot be reversed. In fact, this behavior should not be ignored because in some circumstances not only does it cause harmful effects to society, but also a person who carelessly shares misinformation may face legal consequences. For example, during the recent political instability in Thailand, the panic caused by rumors spread on social media that mentioned the possibility of a military coup and urged the public to hoard food and water prompted the Thai government to prosecute anyone who shared and reshared misinformation (Sakawee, 2013). Similarly, in the United Arab Emirates, jail terms and fines are among the penalties that the government has implemented to counter false rumors circulated on social media (McGinley, 2015). Therefore, being aware of ones' own behaviors when exposed to social media information is important in order to avoid any negative consequences.

In an attempt to propose some personal characteristics as helpful in preventing this behavioral tendency, the present research illustrates the contribution of mindfulness, which can enhance people's tendency to question the validity of information posted on social media when they are deciding whether or not to share it. Subsequently, if social media users are mindful when receiving news and information, the spread of inaccurate information could be reduced. Given this concern on the negative effects of sharing misinformation, finally, the present study suggests that a campaign that aims to encourage

citizens to be mindful when they are exposed to information on social media may be a solution that policy makers should consider in order to prevent the spread of misinformation in society.

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APPENDIX

Measurement Items and Factor Loadings

Tendency to Believe Content Posted on Social Media

- I think all content posted on social media can be trusted (.84).
- I normally believe all content posted on social media (.854).
- I think all content posted on social media is accurate enough to be trusted (.842).
- There is no need for me to verify the accuracy of the content posted on social media (.744).

Tendency to Share Content Posted on Social Media

- I normally share content posted on social media without any concern about its accuracy (.786).
- I normally share content posted on social media quickly without considering the consequences it may cause if the information is invalid (.884).
- I normally share all content I like on social media quickly without thinking because I feel it will cause no harm to anyone (.839).
- I normally share all content I like on social media quickly without thinking because I believe it will not cause any negative outcome (.804).

Skepticism

- I seldom believe anything I have not proven myself (.735).
- I always search for additional information to verify the accuracy of what I have heard before I decide to believe it (.762).
- I always evaluate the trustworthiness of sources of information before I believe any information (.76).

Mindfulness (Brown & Ryan, 2003)

- I could be experiencing some emotion and not be conscious of it until some time later (.91).
- I break or spill things because of carelessness, not paying attention, or thinking of something else (.854).
- I find it difficult to stay focused on what's happening in the present (.893).
- I forget a person's name almost as soon as I've been told it for the first time (.84).
- It seems I am "running on automatic," without much awareness of what I'm doing (.819).
- I rush through activities without being really attentive to them (.901).
- I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there (.878).
- I do jobs or tasks automatically, without being aware of what I'm doing (.845).
- I find myself listening to someone with one ear, doing something else at the same time (.934).
- I drive places on 'automatic pilot' and then wonder why I went there (.848).
- I find myself preoccupied with the future or the past (.748).
- I find myself doing things without paying attention (.885).
- I snack without being aware that I'm eating (.792).

Collectivism (Singelis et al, 1995)

- My happiness depends very much on the happiness of those around me (.799).
- I like sharing things with others (.904).
- To me pleasure is spending time with others (.799).
- I feel good when I cooperate with others (.888).
- It is important for me to maintain harmony within my group (.841).