The Relationship between Needs, Motivations, and Information Sharing Behaviors on Social Media: Focus on the Self- and Social-Connection

Abstract

Purpose-The purpose of this research is to investigate the factors that influence the information sharing behavior of individuals on social media. Furthermore, the study analyzes the effect that individuals' self-connection to social media has on information sharing through self-efficacy and the effect of social-connection on information sharing through empathy.

Design/methodology/approach-A survey questionnaire was developed and distributed to social media users from general participants in the Republic of Korea. A total of 824 valid responses were obtained. Hypotheses were tested using Structural Equation Modeling and applying SmartPLS 3.0.

Findings-The result indicated that individuals are motivated to share information through self-connection and social-connection. Furthermore, the mediation analysis revealed that the effect of self-connection on information sharing in social media is mediated by self-efficacy. Also, social-connection will increase information sharing not only directly but also indirectly through its positive effect on empathy.

Originality/value- We focused on the basic needs of humans and tried to reveal the relationship between human needs and motivational beliefs, which are self-efficacy and empathy, and information sharing behavior on social media. Through the individual's fundamental needs that social media can satisfy, individuals will gain positive psychological benefits through using social media. This study considered what psychological benefits social media can provide.

Keywords: Social media, Information sharing behavior, Self-connection, Social-connection, Self-efficacy, Empathy

1. Introduction

Social media is a service that allows communication based on human networks regardless of time and space and is an attractive platform for individuals who wish to communicate with a diverse population (Appel et al. 2020; Shen et al., 2020; Ismail, 2017; Yu and Yuan 2019). Since social media is ultimately sustained by individuals who voluntarily share information, several studies exploring various factors affecting information sharing have been conducted (Gal et al., 2014).

To reveal the mechanism behind online information sharing, studies have generally focused on the motivations caused by it (Osatuyi, 2013; Shen et al., 2020). Since motivation is the fundamental force that causes humans to act, it has been extensively studied as a predictor of information sharing behavior (Cho et al., 2015; Ghaisani et al., 2017; Hosen et al., 2021). While there have been many studies that reveal the existence of motivation for information sharing behavior within social media (e.g., Cheng and Guo, 2015; Ellison et al., 2007; Fu et al., 2017; Herhausen et al., 2019), the origin of the need for this motivation has been overlooked by extant research. Motivations are activated to relieve the tension resulting from increased desire (Ryan and Deci, 2000). Therefore, it is necessary to identify the needs that influence motivation, as well as the motivations used to describe information sharing behavior within social media.

According to the Self-Determination Theory (SDT), connectedness, an individual's psychological need, is an important inner concept that arouses and strengthens an individual's internal motivation (Demircioglu and Chen, 2019; Ryan and Deci, 2000) and one feature of social media is that it encourages connection (Rahman et al., 2018; Ting, Abbasi, and Ahmed, 2021). This research distinguished the connectedness, an important need of SDT, into self-connection and social-connection through social media and set the relationship of needs satisfaction-motivation-information sharing. This is because motivation through the satisfaction of these needs is stable and not shaken by external factors (Demircioglu and Chen 2019). Consequently, individuals will gain positive psychological benefits from using social media by satisfying their basic needs, which social media can fulfill.

Examining the relationship between needs, motives, and behaviors of individuals who share information on social media not only allows a better understanding of social media platforms but is also a necessary process that analyzes individuals who ultimately lead social media. Thus, this study analyzes the effect that individuals' self-connection to social media has on information sharing through self-efficacy and the effect of social-connection on information sharing through empathy. Previous studies have considered self-connection and social-connection as direct motivations for information sharing. However, according to SDT, connectedness is an important basic need for humans to arouse internal motivation (Demircioglu and Chen, 2019; Ryan and Deci, 2000). We further attempted to reveal the relationship between human needs (self-connection and social-connection) and motivational beliefs (self-efficacy and empathy). Therefore, we set 3 processes (need satisfaction, motivational beliefs, information sharing behaviors) as our research framework.

2. Literature Review

In the early stages of research on information sharing, most studies examined anonymous platforms (e.g., online forums), where users often hide their identities using pseudonyms. However, with increased usage and engagement on social media, where most users present their identities, extant literature has studied the psychological motivation (Karahanna et al., 2018) for information sharing behavior on various social media platforms (e.g., Cheng and Guo, 2015; Ellison et al., 2007; Fu et al., 2017; Herhausen et al., 2019; Stephen and Lehmann, 2016; Ting, Abbasi, and Ahmed (2021).

Previous studies mainly revealed that individuals tend to engage in information sharing behaviors on online platforms for self-presentation and social motives (e.g., Ellison et al., 2007; Fu et al., 2017; Grewal et al., 2019; Hollenbeck and Kaikati, 2012; Shane-Simpson et al., 2018). These two psychological incentives have been mainly studied as the motivational antecedents of information sharing behavior on social media.

To further understand the situational effects between motivations and information sharing, several

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studies have investigated the moderating effects between the relationships. For example, there is research on types of social capital that form strong relationship bonds and bridge weak relationships and the types of messages they share such as commercial messages, lifestyle issues, or personal opinions (Ellison et al., 2007; Fu et al., 2017; Wilcox and Stephen, 2013). Also, some researchers have examined moderating effects by implementing cross-site comparisons that delve into the users' behavioral differences across several social media platforms such as Facebook, Instagram, Pinterest, or Twitter. (e.g., Errasti et al., 2017; Kim et al., 2017; Phua et al., 2017; Shane-Simpson et al., 2018; Waterloo et al., 2017; Whitty et al., 2017). This aspect was examined because users' behavior patterns and cultural mores on each social media platform and their main purposes in using the various platforms are different (Joinson, 2008; Shane-Simpson et al., 2018). Furthermore, from the perspective of brand management and consumer-brand relationships, several studies have investigated the internal and external motivations of users or consumers in engaging in interactions with a particular brand on social media (e.g., Algharabat et al., 2020; Hollenbeck and Kaikati, 2012; Jin and Huang, 2017; Kim and Kim, 2016).

Moreover, because previous studies considered these two psychological incentives of self-presentation and social motives as direct motivations for information sharing behaviors, mediators in the relationship have not been examined. However, delving into a deeper level of the mechanism can give a more comprehensive understanding and reveal implications of information sharing on social media. Thus, we consider self-connection and social-connection as basic human needs which can be met on social media.

Specifically, according to the literature, we found two motivational self-beliefs: self-efficacy, which is the belief in ability, and empathy, which is the belief in sharing someone else's feelings. We believe that when these two motivational beliefs are enhanced by satisfying needs of self-and social-connection, people are likely to show information sharing behavior on social media. By examining each mediator of the relationship between these needs and information sharing behavior, we can provide a deeper understanding of the psychological mechanism underlying users' information

sharing behavior.

3. Hypothesis Development

Self-connection starts from the concept of self. Self-concept is generally considered to be an aggregation of thoughts and feelings that individuals have about themselves (Hermanda, 2019; Sirgy, 1985). This self-concept shows a preference for a specific product or brand when the latter identically reflects one's self-image (Aaker, 1999). In other words, self-connection activates one's identity system and can be understood as a manifestation of an expression of the collective self or the relationship that can deliver one's core identity. While self-connection has hitherto been studied based on products and brands (Aaker, 1999; Sirgy, 1985), posts on social media such as Facebook have shown that self-identity could also be expressed similarly (Van Dijck, 2013). Based on Aaker's (1999) self-connection concept that emphasizes the expression of self-identity, this study has analyzed the degree of connection between an individual and their social media account (Burnasheva and Suh, 2020).Since social media accounts generally allow individuals to express their needed self-image through sharing their opinions, pictures, and everyday life (Burnasheva and Suh, 2020; Strano, 2008; Van Dijck, 2013), it can be said that an individual's self-connection to their social media accounts is very high.

The motivation to express one's identity works as a prominent driver because enabling self-expression is a characteristic of social media (Grewal, Stephen, and Coleman, 2019; Kim and Kim, 2016; Shane-Simpson et al., 2018). It can be said that the higher one's self-connection to one's social media account, the more likely it is that their social media reflects their identity. Hence, self-connection can be predicted to actively impact self-expression through social media. Since consumers with high self-connection think that even providing objective information or data can reflect their thoughts and self-image and providing helpful information to others can secure characteristics of their identity such as expertise (Cheng and Guo, 2015), higher self-connection can lead to a more active impact on information sharing. Therefore, we expected that fulfilling the need for self-connection by

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using social media could enhance information sharing on the platforms.

H1. Self-connection is positively associated with information sharing on social media.

Numerous previous works have examined the role of self-concept connection regarding consumers' consumption experience (Belk, 1988; Berezan et al., 2018; Fournier, 1998), and indicated the extent to which consumption of products or services reflects individuals' self-concepts. A higher self-connection between self and the brand leads to higher brand attitudes or brand attachment. Consumers' self-connection benefits not only brand performance but also consumers' psychological state. Accordingly, the self-connection between an individual and a certain object, including physical products and intangible services, can improve the individual's psychological state.

Furthermore, when the self is activated, for example, through a certain event that is related to the self or enhances the self, a positive mood can be generated. Since the self is the most important source of positive experiences, experiences or behaviors related to one's identity or self can generate certain emotions (Coleman and Williams, 2013; Whitty et al., 2018). Such positive emotions can counteract negative emotions that diminish levels of self-efficacy. As people are likely to associate themselves with the qualities and images that an object represents (Grewal, Stephen, and Coleman, 2019), such association leads to a sense of self-verification, thereby positively impacting their psychological state. Based on this literature, we expect that when consumers establish higher self-connection between the self and the social media, they perceive higher self-efficacy.

According to previous studies on the outcomes of self-efficacy, individuals who perceive enhanced self-efficacy actually show better behavior or performance in a corresponding domain and take the initiative in different conditions (Raub and Liao, 2012; Yim et al., 2012). This is because self-efficacy, a kind of self-evaluation based on competence and social acceptance, is an important source of intrinsic motivation that drives engagement in activities for the sake of the activity itself rather than external rewards (Bandura, 1986). The same applies to the online environment. In the context of

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social media, individuals as information providers can enjoy expected benefits from the exchange process, which could be either intrinsic or extrinsic as previously mentioned (Chen et al., 2019; Vallerand, 1997).

In the context of social media, when people experience an increase in self-efficacy by using and experiencing social media, intrinsic motivation can enhance information sharing behavior (Chen et al., 2019). Thus, the belief in increased self-efficacy can serve as a self-motivational force for knowledge contributors to share their knowledge with other people (Bock and Kim, 2002). Furthermore, by enhancing their reputations, individuals may receive intrinsic benefits from contributing knowledge because knowledge and information are deeply related to the personal character and identity of an individual. Therefore, we expected that when an individual's self-connection needs are fulfilled, the resulting increase in self-efficacy could promote information sharing behaviors.

H2: Self-efficacy mediates the relationship between self-connection and information sharing.

Furthermore, as social media is able to achieve effective social interactions through networking functions (Appel et al., 2020; Hall, 2018), it can fulfill the social-connections between individual and others (Hudson et al., 2016; Subramanian, 2017). Social-connection is defined as a subjective awareness of the closeness of an individual's relationship with society (Grieve et al., 2013; Lee et al., 1995), that is, the activation of social and external relationships. The need to belong is a fundamental human desire (Baumeister and Leary, 1995; Wang et al., 2018), and according to the self-determination theory, relatedness, among the A-R-C (Autonomy, Relatedness, Competence) desires, signifies the desire to feel a sense of belonging in the society (Ryan and Deci, 2000). In previous research, peer influence was considered a strong element of influence on social media (Osatuyi, 2013; Sherman et al., 2018), and when social media is defined as a space for reinforcing relationships with others (Baird and Parasnis, 2011), the social capital of social media can be said to have high social-connection (Putnam, 2001). As such, social connections are strengthened, and information spreading

behavior or sharing behavior is reinforced (Fu et al., 2017).

Therefore, it can be predicted that the more socially connected one feels, the more active its impact on one's self-expression in the social area. Moreover, as consumers with successful social connections can earn various benefits through sharing information, they tend to share information with others much more actively (Osatuyi, 2013; Steijn and Schouten, 2013). Thus, we can expect that the higher the social-connection, the greater the impact on information sharing.

H3. Social-connection is positively associated with information sharing in social media.

There are several motivations for information sharing in social media. Empathy is one of the motivations of information sharing on social media, which is discussed in this framework (Oh and Syn, 2015). Empathy is facilitated by increased exposure to interaction with others (Busby and Cardner, 2008; Errasti, Amigo, and Villadangos, 2017). According to Koestner et al. (1990), children were more likely to grow up to be empathic adults when both parents enjoyed communicating with their children (Koestner et al., 1990). Further, people who are highly committed to their in-groups have more pro-social behavior towards their in-group (those who share identification with a particular social group) than out-groups (Weisz and Zaki, 2018). For example, people experience positive empathy in intimate relationships with friends, romantic partners, roommates, family members, etc. (Gable and Reis, 2010; Gable et al., 2004). Social connections will affect empathy because empathy is formed in positive relationships with people (Morelli et al., 2015). Empathetic motivation leads to pro-social behavior such as spending on others, emotional support, and tangible assistance (Morelli et al., 2015). In terms of the energy that makes one act (Ryan and Deci, 2000), empathy encourages the sharing of information on social media (Oh and Syn, 2015). Therefore, we expected that by fulfilling social-connection needs on social media, an individual's perceived empathy would increase, which would promote information sharing behaviors.

H4: Empathy mediates the relationship between social-connection and information sharing.

3. Methodology

3.1. Sampling and data collection

This study collected data from consumers using social media (Facebook and Instagram) in the Republic of Korea. Data collection was conducted as a quota sample by requesting surveys from professional survey institutions for a fairly distributed ratio of all age groups in order to increase external validity. The collected data were used to analyze 824 individuals who used Facebook (n=521) and Instagram (n=303) as social media platforms.

The demographic characteristics of the research participants were as follows. Gender distribution was roughly equal, with 430 males (52.2%) and 394 females (47.8%). The age distribution indicated that 248 individuals were in their 20s (30.1%), 211 were in their 30s (25.6%), 165 were in their 40s (20.0%), 141 were in their 50s (17.1%), and 59 were in their 60s (7.2%).

3.2 Measures

To test hypotheses that make up the research model, the survey questionnaire applied questions from previous studies. All of the responses were measured on a 5-point Likert scale (1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree). The self-connection variable, based on Fournier's (1998) and Aaker's (1999) studies was utilized after being applied to our research. The social-connection was adapted from Lee and Robbins (1995). The self-efficacy variable, based on Bandura (1996), was also applied. The empathy variable was applied based on Greif and Hogan (1973) and Busby and Gardner (2008). Lastly, questions of measurement were framed with regards to sharing behavior on social media from Oh and Syn (2015) and Osatuyi (2013).

4. Results

For analysis, this study used SPSS 21.0 software and Smart PLS 3.0. PLS-SEM allows the

researchers to handle multifaceted models with many constructs (Hair et al., 2011) and obtain richer results and is well-suited for multi-group analysis (MGA) (Sim et al., 2021).

4.1 The measurement model

Measurement model analysis for PLS-SEM was carried out. Internal consistency reliability, convergent validity, and discriminant validity were all measured in the measurement model. Table 1 shows that there was convergent validity and internal consistency reliability. All the constructs fulfilled the convergent validity and internal consistency reliability. Also, discriminant validity was assessed using the Fornell and Larcker's criterion (1981) in Table 2.

Table 1. Convergent validity and internal consistency reliability

Construct	Indicator loading	C.R	AVE	Cronbach's Alpha
Self-connection I am able to express who I am through social media	0.879	0.894	0.738	0.823
I am able to show my current image and tendencies through social media	0.841			
I am able to show others who I am through social media	0.857			
Social-connection I feel well connected with my surroundings through social media	0.803	0.873	0.695	0.781
I feel positive emotions towards people connected with me through social media	0.851			
I feel a sense of belonging through social media	0.847			
Self-efficacy I think I will be able to obtain the ability and imagination to handle any kind of situation	0.904	0.941	0.841	0.905
Through social media, I feel that I will be able to solve any difficulty with enough effort	0.925			
I think I can get over a difficulty.	0.922			
Empathy By using social media, I have come to understand myself and others more	0.867	0.89	0.73	0.815
I think social media provides an important opportunity to learn about others living in different areas	0.824			
I have learned about various and new cultures through social media	0.871			
Information sharing I share news of interest through social media	0.795	0.869	0.689	0.774

I share links that I like through social media	0.838
I frequently upload interesting articles from other mediums in order to share information with my social media friends	0.857

Note(s): SFC=Self-connection, SE=Self-efficacy, SHA=Information sharing, SOC=Social-connection, EMP=Empathy

Table 2. Fornell and Larcker's Criterion: discriminant validity

Description	SFC	SOC	SE	EMP	SHA
Self-connection	0.859*				
Social-connection	0.670	0.834*			
Self-efficacy	0.487	0.523	0.917*		
Empathy	0.611	0.627	0.613	0.854*	
Information Sharing	0.600	0.585	0.570	0.697	0.830*

Note: *the square root of the AVE.

SFC=Self-connection, SE=Self-efficacy, SHA=Information sharing, SOC=Social-connection, EMP=Empathy

Before analyzing the SEM, we checked the multi-collinearity through the variance inflation factor (VIF). As indicated in Table 3, all the VIF values were less than 3 and no multi-collinearity problems were found.

Table 3. VIF values

	Information sharing
Self-connection	2.052
Social-connection	2.159
Self-efficacy	1.701
Empathy	2.179

Sarkar et al. (2001) proposed using the explained variance (R^2) measure to assess a model's predictive power. The results of this study explained 39.2% of R^2 variance in empathy, 23.6% of R^2 variance in self-efficacy, and 55.8% of R^2 variance in information sharing, which was a good predictor from the current study's perspective (Falk and Miller, 1992).

The procedure for evaluating f^2 is to check the values, which are 0.35 for a large impact, 0.15 for a medium impact, and 0.02 for a small impact of the exogenous construct. Our results revealed that self-connection and self-efficacy had a small effect (f^2 =0.042, 0.038, respectively, i.e., <0.15) on information sharing. Empathy had a medium effect (f^2 = 0.169) on information sharing and self-

connection had a medium effect (f^2 =0.31) on self-efficacy. Social-connection had a large effect (f^2 =0.648) on empathy whereas social-connection had no effect (f^2=0.013) on information sharing.

The Q^2 measure demonstrated that the model created from the sample had predictive relevance or predictive power. The Q^2 was found to have positive values in this study, with the Q^2 value for self-efficacy being 0.197, the Q^2 value for empathy being 0.282, and the Q^2 value for information sharing being 0.379. Furthermore, the model's fitness was satisfied with a square root mean residual (SRMR) value of 0.059, based upon the fact that the recommended value is less than 0.08. (Hu and Bentler, 1999). All of the findings point to a theoretical explanation for the proposed model. Based on the analyses, we concluded that there was no issue regarding collinearity in our data, and thus proceeded to hypothesis testing.

4.2 Hypotheses assessment

This study found that the direct effect of self-connection on information sharing was significant (β=0.196; t=4.725; p<0.001); thus, H1 was supported. Self-connection had a direct significant impact on self-efficacy (β=0.487; t=18.041; p<0.001) and self-efficacy had a direct significant impact on information sharing (β=0.169; t=5.324; p<0.001). The mediation analysis revealed that the effect of self-connection on information sharing in social media was mediated by self-efficacy. Finally, the estimated indirect effect of self-connection on information sharing mediated by self-efficacy was significant (β =0.252, t=11.117, p<0.001, 95% CI [0.209; 0.295]). The results revealed that self-efficacy partially mediated the effect of self-connection on information sharing. Therefore, we found support for Hypothesis 2. To summarize, self-connection increases information sharing not only directly but also indirectly through its positive effect on self-efficacy, which increases information sharing.

Furthermore, the direct effect of social-connection on information sharing was positive and significant (β = 0.113, t=2.848, p <0.005), which supports Hypothesis 3. The effect of social-

connection on empathy was also significant (β =0.627, t=26.509, p<0.001). The relationship between empathy and information sharing was positive and significant (β =.403, t=12.406, p<0.001). Finally, the estimated indirect effect of social-connection on information sharing mediated by empathy was significant (β = 0.082, t=5.136, p<0.001, 95% CI [0.051;0.111]). The results revealed that empathy partially mediated the effect of social-connection on information sharing. Therefore, we found support for Hypothesis 4. To summarize, social-connection will increase information sharing not only directly but also indirectly through its positive effect on empathy, which increases information sharing. The result summaries for all hypotheses are shown in Table 4 and the mediation results are shown in Table 5.

Table 4. Hypotheses testing and structural relationship results

	PC	SE	95%CIB	95%CIB	t-value	p-value
Direct effects						
SFC -> SE	0.487	0.027	0.433	0.537	18.041	0.000
SE -> SHA	0.169	0.032	0.103	0.225	5.324	0.000
SFC -> SHA	0.196	0.041	0.122	0.278	4.725	0.000
SOC -> EMP	0.627	0.024	0.564	0.666	26.509	0.000
EMP -> SHA	0.403	0.032	0.339	0.463	12.406	0.000
SOC -> SHA	0.113	0.04	0.031	0.186	2.848	0.005
Indirect effects						
SFC -> SE -> SHA	0.252	0.023	0.209	0.295	11.117	0.000
SOC -> EMP -> SHA	0.082	0.016	0.051	0.111	5.136	0.000

Note(s): SFC=Self-connection, SE=Self-efficacy, SHA=Information sharing, SOC=Social-connection, EMP=Empathy

Table 5. Mediation results

Mediation effects	PC	SE	95%CIB	95%CIB	Direct effects	Mediation
SFC -> SE -> SHA	0.252	0.023	0.209	0.295	Significant	Partial
SOC -> EMP -> SHA	0.082	0.016	0.051	0.111	Significant	Partial

Note(s): SFC=Self-connection, SE=Self-efficacy, SHA=Information sharing, SOC=Social-connection, EMP=Empathy

To investigate the possibility of biased results due to social network characteristics, we used MGA

to compare the most commonly used social networks in Korea, namely Facebook and Instagram.
Table 6 shows the MGA results based on the type of social media platform. The MGA results revealed
no difference in the path value between Facebook and Instagram platforms.

Table 6 MGA results of Facebook vs. Instagram

	Path Coefficients-difference	p-value Henseler's MGA
Direct		
SFC -> SE	-0.028	0.590
SE -> SHA	0.004	0.952
SFC -> SHA	-0.023	0.737
SOC -> EMP	0.028	0.674
EMP -> SHA	0.006	0.896
SOC -> SHA	-0.019	0.796
Indirect		
SFC -> SE -> SHA	-0.012	0.819
SOC -> EMP -> SHA	0.009	0.778

Note(s): SFC=Self-connection, SE=Self-efficacy, SHA=Information sharing, SOC=Social-connection, EMP=Empathy

4.3 Replicating the results in Western culture

This study conducted analyses on South Korean consumers and presented an interpretation of the
results from the sample. Cultural differences are factors that influence consumer behavior and
judgment (Hofstede, Hofstede and Minkov 2010). Therefore, for the generalization of this research
model, we replicated it with American consumers, a representative country of Western culture (Chen
2018). The additional study collected data from consumers using social media (Facebook and
Instagram) in the US. Further surveys were conducted using the Amazon MTurk platform to recruit
respondents and conduct the surveys. A total of 495 Americans living in the United States were
recruited using the MTurk platform. Participants were provided with a small participation fee as a
survey incentive. Demographic characteristics of survey participants included 272 men (54.9 %) and
223 women (45.1 %). The age distribution was 108 people in their 20s (21.8 %), 172 people (34.7 %)
in their 30s, 116 people in their 40s (23.4 %), 55 people (11.1 %) in their 50s, and 44 people (8.9 %)

in their 60s. The questionnaire was translated into English from the Korean questionnaire and was administered in the same format.

Measurement model and structural model analysis for PLS-SEM were carried out. First, the convergent validity results, as well as internal consistency and reliability results, were found to be satisfactory according to threshold values. The values of AVE were higher than 0.50 and CR were higher than 0.7 for all the constructs (Hair et al., 2010). Also, all the constructs fulfilled the discriminant validity criteria.

The VIF indicates whether a predictor has a strong linear relationship with another predictor. Based on the analyses, we concluded that there was no issue regarding collinearity in our data, and thus proceeded to hypothesis testing. The results of this study revealed 55.7% of R^2 variance in empathy, 37.7% of R^2 variance in self-efficacy, and 39.7% of R^2 variance in information sharing. The results showed that self-connection ($f^2 = 0.036$), social-connection ($f^2 = 0.046$), and self-efficacy ($f^2 = 0.031$) had a medium effect on information sharing whereas empathy had no significant effect on information sharing ($f^2 < 0.02$). Self-connection had a large effect on self-efficacy ($f^2 = 0.609$) and social-connection had a medium effect on empathy ($f^2 = 0.264$). The Q^2 value for self-efficacy was 0.296, for empathy it was 0.376, and for information sharing it was 0.311. The model's fitness was satisfied with the square root mean residual (SRMR) value of 0.061. All the results showed a theoretical explanation for the proposed model.

This study found that the direct effect of self-connection on information sharing was significant ($\beta=0.221$; $t=3.160$; $p<0.005$). Self-connection had a direct significant impact on self-efficacy ($\beta=0.615$; $t=16.32$; $p<0.001$) and self-efficacy had a direct significant impact on information sharing ($\beta=0.206$; $t=3.005$; $p<0.005$). The estimated indirect effect of self-connection on information sharing mediated by self-efficacy was significant ($\beta=0.127$, $t=2.94$, $p<0.005$, 95% CI [0.044; 0.216]). The results revealed that self-efficacy partially mediated the effect of self-connection on information sharing. Also, the direct effect of social-connection on information sharing was positive and significant ($\beta=0.292$, $t=3.717$, $p<0.001$). The effect of social-connection on empathy was also

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significant (β =0.747, t=27.213, p<0.001). The relationship between empathy and information sharing was not significant (β =-0.008, t=0.105, p=.916). The estimated indirect effect of social-connection on information sharing mediated by empathy was not significant (β =0.006, t=0.104, p=0.917, 95% CI [-0.126;0.095]). According to the MGA results, there was no difference in the path value between Facebook and Instagram platforms in the US.

5. General Discussion

5.1 Summary

This study showed the role of psychological belief of self as a mediator. Also, psychological needs can trigger motivational self-beliefs that can result in increased information sharing. Because psychological needs are universal, our research model can be incorporated into situation-specific models of information sharing behavior of social media.

As a result, self-connection and social-connection both had a direct impact on information sharing in South Korea. More importantly, we found that self-connection enhances information sharing not only directly but also indirectly through its positive effect on self-efficacy. Likewise, social-connection enhances information sharing not only directly but also indirectly through its positive effect on empathy.

Additionally, as a result of executing a replication analysis with respondents from a different culture (the US), it was found that satisfying needs of self-connection and social-connection also directly caused a positive effect on social media's information sharing. Moreover, concerning mediation effects, self-efficacy played a significant role as a mediator between self-connection and information sharing. However, in contrast to Korean consumers, the mediator effect of empathy between social-connection and information sharing was not significant among US respondents.

5.2. Implications

Our results and findings have implications for both researchers and practitioners. First, the current study can shed light on the positive influence of using social media in terms of users' psychological benefits. Although there is an increase in studies that examine negative outcomes from using social media, such as fatigue, depression, and invasion of privacy (e.g. Appel et al., 2020; Özdemir et al., 2014; Xu and Tan 2012), research still suggests that social media use is positively associated with users' life satisfaction, social trust, self-esteem, and psychological well-being (e.g. Kim and Kim 2016; Nabi et al., 2013). It is thus necessary to understand the fundamental needs of individuals as they use social media. Through the individual's fundamental needs that social media can satisfy, individuals will gain positive psychological benefits through using social media. In line with this, the results of this study show that satisfying the needs of self- and social-connection can enhance psychological capital such as self-efficacy and empathy. Although this study did not investigate the effects of this psychological capital on well-being, according to the field of positive psychology, there is no doubt that an increase in such psychological capital can also positively affect psychological well-being. Our study provides additional evidence for the fact that social media use may have beneficial effects on psychological health-related outcomes.

Second, Research has largely focused on investigating the moderating effects or situational factors in the relationship between motivations and information sharing behaviors on social media, and mediators in the relationship had not been examined in extant research. However, we consider that self-connection and social-connection are basic human needs that can be met on social media. We thus found that satisfying the needs of self-connection and social-connection can enhance certain motivational beliefs of self, resulting in promoting information sharing behaviors.

Lastly, although the purpose of usage and the behavior patterns on each social media platform are different from each other (Joinson, 2008; Shane-Simpson et al., 2018), we found that our research framework has been demonstrated across platforms in Korea. This indicates that regardless of the types of platform, satisfying needs of self- and social-connection are basic starting points to promote users' engagement including information sharing behavior.

5.3 Limitations and Future Research

There are some limitations to the current study, which can provide some guidelines for future research based on our findings. This study lacks statistical generalizability in terms of samples of nationality. However, we empirically tested our research framework with another sample based on a different cultural background, using US respondents to represent Western culture. Unlike in the Korean sample, the results demonstrated different paths on empathy, and showed that the mediating role of empathy was not significant. We can infer that these results reflect the cultural differences between Western culture, which prefers individual thinking, and Eastern culture, which prefers collective thinking (Kim et al., 2019). According to Hofstede's cultural dimensions (2001, 2010), the US is representative in the dimension of individualism while Korea is high in the dimension of collectivism. This cultural difference may influence the effect of social-connection on feelings of empathy. The results of the current study may provide interesting implications; however, we did not develop a formal hypothesis to prove this phenomenon. Accordingly, a rigorous cultural comparison study on the usage of social media should be investigated. This result can shed light on a useful global strategy in terms of managing social media in different cultural contexts.

Moreover, the relative effect of self-connection and social-connection on information sharing behaviors must be further studied by developing a formal hypothesis. Our current study did not examine the relative effects of satisfying these needs on information sharing behavior. However, we can expect that some moderators, such as types of media and user characteristics, may affect the relative effect of these connections very differently. This may provide interesting theoretical and practical implications and could prove to be a fascinating area for future research.

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