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# Social Media Performance: From the Perspective of Social Media Apathetic Behavior*

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## Abstract

***Purpose*** – Social media platforms have presented individuals with an opportunity to create and maintain their social relationship through the use of social media services. However, such social relationship has a negative influence on users' interest in social media.

***Design/methodology*** – Using structural equation modeling, this study seeks to examines the effects of different social media conflicts (individual and social conflicts) on users' psychological internal state, especially user apathetic behavior

***Findings*** – The findings confirm that, among social media conflicts, social-related conflict, especially social interaction overload has a negative effect on cognitive resonance, while individual conflict has the highest effect on cognitive dissonance. Also, cognitive dissonance has a much greater effect than cognitive resonance on user resistance, this means that users' negative perception of social media has a greater influence on their resistance. Lastly, user's resistance was found to have a positive influence on user's apathetic behavior.

***Originality/value*** – In other to capture social media Apathetic behavior, this study focus on social media conflict perspective, which includes social-related conflict and individual conflict, which are found to influence users' internal states towards social media and further induce social media behavior. This study is unique because it is among the first to explore social media apathetic behavior by focusing on the influence of both external social media conflict and internal state. Also, this study proposed that social related conflict has a higher negative influence on WeChat user than individual related conflict.

**Keywords**: Apathetic Behavior, Cognitive Dissonance, Cognitive Resonance, Social Media Conflict, Social Media Performance

**JEL Classifications**: D12, F14, O53

## 1. Introduction

LinkedIn which is one of the famous social media sites in the world stated that as of December 2019, 48.1 percent of its users in the United States were not participating actively in logging-in. (Statista, 2020). Even though social media have rapidly gained users in recent years, some users' have reduced the usage of their favorite social media.

Users are typically thought to be active and creative on social media platforms; however, only a few users contribute to social media because their level of activities on social media

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depends on their interest. For instance, consumers are not necessarily as active as believed, their activity level depends on differences in their interest on social media, and only a small number of users contribute to social media (Heinonen, 2011).

This issue has not been sufficiently addressed in academic research. Previous research has mostly focused on the social media continuance usage due to its benefit (Hur et al., 2017; Idemudia, Raisinghani & Samuel-Ojo 2018; Ofori et al., 2015; Ashraf, Hou & Ahmad, 2019). While research focusing on the social media discontinuance usage is relatively few. More so, must studies on social media discontinuance behavior is mostly focused on the behavior of users who opt out from social media totally. Therefore, to elaborate on users' social media usage, it is necessary to consider the phenomenon of users' apathy to identify why users reduce their activity on social media.

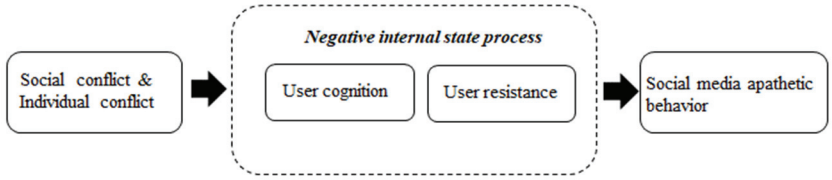
Previous research suggested that some users leave their accounts dormant or deactivated because of social media related factors such as feeling of boredom and the perceived invasion of social media. (Zhou et al., 2015). As social media provides services to users, which allow them to reveal their information for interpersonal relationships and facilitate their social connection; it indirectly discloses individuals' communication of thoughts and feelings in emotional text (Misoch Sabina, 2013). In addition, individuals also aim to be integrated with others around by using social media Chu & Chen (2019). Users will feel satisfied when they share details of their lives with others, but become anxious when they have no idea what their friends are up to on social media. As such this might result in individuals' need to repeatedly check their SNS platforms. Such a feeling of satisfaction when user share details of their live with other and the feeling of anxiousness and stress when they have no idea what their friends are up to on social media creates conflicting feelings within the user.

Therefore, excessive social media usage for emotional satisfaction or to maintain social connections can result in users' social media conflict and thus social media apathy behavior. More importantly, even if users feel exhausted while using social media, strong links such as keeping in touch with friends or sharing online information creates conflicting intention to reduce usage (Shin, 2010; Cho et al., 2016). In addition, a few researchers have suggested that as a member of social networks, an individual's behavior may be influenced by others, and inappropriate social behavior can induce users to feel fatigued, driving them to reduce their usage or leave social media totally (Zheng & Lee, 2016).

This study seeks to examine the triggers of social media apathetic behavior by focusing on social media conflict, involving both social and individual conflicts. However, a question arises as to whether when users perceive such conflicts and, consequently, lose interest in social media, their apathetic behavior is affected only by the external environmental factors mentioned above.

The risk of social media invasion and stress of social media notification overload may conflict with users' prior expectations of using social media to relax. Such risk may lead to a negative psychological attitude toward social media (Luqman et al., 2017). These feelings of dissatisfaction or regret may be responsible for users' intentions to avoid social media use; ultimately, users' inactivity or avoidance of social media will depend on the intensity of their negative psychological internal state. Therefore, a more comprehensive exploration of social media apathetic behavior needs to consider both social and individual conflicts and users' psychological internal states (view Fig. 1).

**Fig. 1.** The overall process driving social media apathetic behavior.




This study seeks to examine the effects of different social media conflicts (both social and individual conflicts) on social media apathetic behavior, focusing on the process of users' psychological internal state. This study focuses on social media (WeChat) in China, because the Chinese market can be used as a business tool for Korean companies to understand the behavior of Chinese consumer. According to DMFA (2022), WeChat has over 1.2 billion monthly active users. As such, it is paramount for Korean companies to understand the behavior of Chinese consumers so that they can target the Chinese market in the future. Also, it should be noted that china is one of the largest social media consumer in Asia (Statista, 2021). As such, understanding and gaining access to this market will be advantageous to Korean companies who intend to explore this market.

## 2. Theoretical Background

### 2.1. Development of Users' Apathetic Behavior

Social media find themselves in a dilemma where many users have intentions to reduce their activeness and even stop their usage after registering. According to the report by Gartner (2010), despite the increase in the total number of social media users, a quarter of respondents said that they used their favorite social media sites less frequently than when they first signed up.

Users could leave platforms for a few months or even years without notifying anyone, consequently having dormant accounts. Social media providers can only depend on the users' activity levels, such as the frequency of comments and the frequency of log-ins, to determine whether an account is dormant or active (Fader & Hardie, 2007). Some researchers regard dormant accounts as a withdrawal from social media, a loss of social media performance. Turel et al., (2014) proposed the notion of "apathetic to social media" to describe such behavior.

Apathetic behavior refers to a lack of interest or enthusiasm in a particular task or topic. The apathetic behavior occurs mainly because individuals lack confidence or do not believe in their ability to achieve the expected results (Hansen & Levin, 2016). In the context of social media, social media apathetic behavior is manifested in users' lack of interest or motivation in either continuing or discontinuing the use. Examples may include an inactive social media account. In such cases, users have little to lose by retaining their user status, but also little incentive to change their status and deactivate the account. However, this situation has been rarely studied in information system research (Turel, et al., 2014).

Apathetic users can be of serious lost to social media, as users are the most valuable assets of social media. The activeness and loyalty of users have a significant impact on the survival and development of social media (Chesney & Lawson, 2015; Chiu & Huang, 2015). Consi-

dering the importance of users, a rich and extensive literature has explored the continuous intention of using social media, regarding this behavior as the opposite of reducing social media usage. However, some studies have indicated that apathetic behavior is a distinct research area that relies on a different mechanism. Users' continuance behavior occurs in the absence of any conscious choice or planning, whereas apathetic behavior requires a driving force to change (Furneaux & Wade 2011). The antecedents of apathetic behavior and continuance behavior may not be the same.

The factors influencing apathetic behavior toward social media have been explained in various ways. Prior studies suggested that people would lose interest in and even stop using social media when they are stressed by its technology (Maier et al., 2012). Social comparison theory refers to the tendency of using other people as sources of information to determine how well you are doing relative to others (Festinger, 1954). Such comparison provides information about oneself as well as other people's abilities and social performance. According to Lee Jin Kyun (2020), social comparison orientation negatively affects the psychological well-being of users, as they tend to compare themselves with superior individuals who are better at their ego-invested domain. Cho (2015) indicated that users would be influenced by external factors, including social disturbance and techno disturbance, which can lead to the phenomenon of apathy to social media. Similarly, Nawaz et al. (2018) found that overload factors, such as social interaction overload, information overload, and social media exhaustion, can increase dissatisfaction with and regret toward social media, further inducing social media apathetic behavior. In addition, technostress creators, including complexity, uncertainty, invasion, disclosure, and social overload, are significant factors that induce users to reduce their activities on social media platforms; also, another superior innovation can motivate users to leave the existing social media and switch to another (Maier et al., 2015). Since social media are also widely used for work-related communication, the conflicts between social media and individuals' work lives and privacy have been explored by researchers.

This study investigates the factors influencing users' loss of interest in social media given the influence of social media conflicts, considering both their social and individual aspects. Previous studies of social media withdrawal behavior mainly focused on the influence of the external environment or the characteristics of the system, ignoring the internal psychological state of social media users; thus, there seems to be a research gap between the initial adoption stage and the final intrusion stage of the social media apathetic usage.

## 2.2. Social Media Conflicts as Triggers of Social Media Apathetic Behavior

### *2.2.1. Social Conflicts Driving Social Media Apathetic Behavior*

Individuals mainly use social media to create or maintain their social relationships. However, there is a cognitive limit to the number of individuals with whom one can maintain stable social relationships, which is embodied as a limit in "Dunbar's number." Individuals can interact with others anytime, anywhere through social media; thus, researchers have noted that the numbers of friends of many users on social media greatly exceeded Dunbar's number and described such situation as social interaction overload (Walther et al., 2008). Many researchers suggest that the social nature of social media can also have negative effects on individuals, such as causing social interaction overload and social comparison (Xiao & Mou 2019; Zhang et al., 2016). The concept of social interaction overload was introduced by Animesh et al. (2011) in social psychology study. Animesh et al. (2011) elaborated that when

the number of social media users are increasing, individuals have to increase their social contacts and connections, which might result in negative consequences, such as feelings of stress and subsequently quitting social contacts. Individuals would likely feel stressed by social media when they perceive that they pay too much attention to others' demands (Shokouhyar et al., 2018). When users perceive social overload using social media, they tend to reduce their activities on social media since they feel overwhelmed or a sense of fatigue.

Also, according to social comparison theory, individuals are motivated to make an accurate assessment of their abilities and opinions. Social comparison theory holds that for individuals to have a stable and clear understanding of themselves, generally they need objective criteria. However, without such objective criteria, individuals will compare themselves to others in society as reference objects. Previous studies explored the relationship between social comparison motivation and Facebook fatigue, social comparison tendency, and social media inactive use behavior. Social comparison could be divided into upward social comparison and downward social comparison. Upward social comparison refers to the feeling that others are better off than oneself; it is related to social media withdrawing. Lee et al., (2014) proposed that upward social comparison always results in negative emotions, such as depression and envy, and is a key mechanism of social media apathetic behavior.

### *2.2.2. Individual Conflict Driving Social Media Apathetic Behavior*

Scholars have also confirmed that with the development of social media, one should focus not only on the benefits brought about by social media to users but also on the invasion of users' life and privacy (Bright et al., 2015). The issue has become increasingly important for social media users, as the conflict between social media and individuals' privacy and lives can also have a significant influence on individuals' attitudes and behaviors (Wan et al., 2017).

At present, the social network of WeChat's users ranges from family and friends to working relationships. The extension of the social network and the increasingly open WeChat platform have induced users to be more cautious when exposing their personal information, and their concerns about privacy and life invasion have increased (Bright et al, 2015). Yao and Cao (2017) proposed that the conflict between social media and individuals' privacy is connected with social media discontinuance behavior. Users may feel uncomfortable using social media that can easily be monitored, as their privacy can be compromised because their activities on social media can be traced. Despite this, social media platforms still do not pay much attention in protecting users' information. For instance, Facebook continues to take a liberal viewpoint on privacy, and Google recently announced major changes to privacy among its properties. Bright et al. (2015) found that individuals with perceived higher social media-privacy conflict are more likely to experience dissatisfaction with social media and have social media apathetic behavior.

In China, companies prefer to use social media such as WeChat and QQ to communicate with employees about work-related issues rather than email; thus, individuals may feel like social media blur the boundaries between work and their home life (Tarafdar et al., 2007). Users have to get in touch with work or keep themselves updated on social media even during vacations, which may result in negative outcomes, such as reduced use of social media or opting out the social media platform entirely (Xiao & Mou, 2019). For example, if WeChat's users perceived a conflict between social media and their privacy and life, they are more likely to reduce posting their personal information on WeChat story or even close their WeChat story completely.

## 2.3. Negative Internal State Process Toward Social Media

Internal psychological state causes individuals to decide what behavioral decisions they will make in the future (Frijda, 2005). According to Frijda (2005) emotional experience not only represents a perspective on emotional reactions but also contributes to the constitution of those reactions, notable with respect to attention shifts, action initiation, action guidance, and emotional regulation. In Frijda's emotional theory, individuals go through a perception step of the initial stimulus, and this perception affects the overall appraisal step, such as preference or non-preference for the object (Malhotra & Nair, 2016). Users experience psychological confusion when they are involuntarily exposed to social media disturbance, such as privacy invasion or overload. In the psychological literature, such a phenomenon is referred to as cognitive dissonance (Gbadamosi, 2009).

The cognitive dissonance theory is used to explain change in user's behavior (Midha & Ngafeeson, 2014). According to Festinger (1957), two cognitions are dissonant if they observe (opposite) of one cognition follows from the other. He elaborated that the existence of dissonance, being psychologically uncomfortable, motivates the user to decrease the dissonance and leads to avoidance of information likely to increase the dissonance. The occurrence of dissonance creates a discrepancy between cognitions and psychological discomfort. In line with Festinger (1957), dissonance can be reduced by removing dissonant cognitions or by increasing the importance of consonant cognition. Borrowing from Festinger theory, Foster and Misra (2013) describe cognitive dissonance as a conflict between attitude and behavior, causing an uncomfortable feeling when an individual maintains more than two psychologically dissonant beliefs or attitudes. To meet their needs, individuals tend to choose from a variety of products or services before making the final purchase. However, in such a decision-making process, even the individuals who had made the best choice still might feel regretful and uncomfortable (Chien et al., 2014). Generally, when individuals' attitudes are coordinated with their behaviors, there is no need to change attitudes or behaviors. However, if there exists a discrepancy between behaviors and attitudes, for example, if some behaviors are contrary to one's attitude, belief, or cognition, or one has done something that he or she did not want to do, cognitive dissonance will occur (George & Yaoyuneyong, 2010).

At the core of the theory of user cognition are individuals who experience cognitive dissonance; to reduce the pressure and discomfort that result from cognitive dissonance, they are more likely to self-adjust to obtain cognitive resonance by changing their behaviors, such as switching or resist using products or services (Milda & Ngafeeson, 2014).

In the context of social media, the social media environmental stimulus that users experience determines their level of negative and positive perceptions, that is, cognitive dissonance and cognitive resonance (Keller, 2009; Ragu-Nathan et al., 2008), whereas the outcome of the level of cognition is presented as psychological approval (Olsen et al., 2005). Previous studies proposed that users experience psychological confusion when they are involuntarily exposed to social media environmental stimuli, such as invasion or overload, and that such cognitive dissonance would induce social media avoidance (Keller, 2009). On the other hand, cognitive resonance is the opposite of cognitive dissonance. In essence, if the service provided by social media satisfies the users' needs or meets their expectations, the levels of cognitive resonance are raised.

## 2.4. Overall Process Leading To Social Media Apathetic Behavior

According to Grace et al. (2015), if a situation is defined by its basic psychological features, then individuals' behavioral tendencies can be identified within that situation and used to predict behavior. Although previous research has proposed various enablers for social media apathetic behavior, few studies have accounted for the negative internal state process leading to social media apathetic behavior.

Therefore, the present study aims to suggest an overall process driving social media apathetic usage behavior by investigating negative psychological states toward social media, which greatly guide users' social media apathetic behavior, including user cognition and user resistance. This study focuses not only on social conflicts involving social interaction overload and upward social comparison but also on individual conflicts involving social media-privacy conflicts and social media-life conflicts.

In the context of social media, individual internal state process is defined as an action in which users accept external environmental stimuli through sensory organs and perceive them differently from social media stimuli. In this study, cognitive resonance which is opposite to cognitive dissonance represent the users' positive and negative perceptions. When users experience invasion through social media of their privacy or daily life or receive social interaction messages that exceed their processing capabilities, they are more likely to have a negative cognition toward social media.

The outcome of the level of cognition is presented as psychological approval. When the users perceive their experience of using social media as different from their expectations, they will refuse to take any participation behavior in social media, that is, user resistance will be induced (Kim & Kankanhalli, 2009).

Consequently, the behavior of social media discontinuance can be particularly evident among social media users in stressful and regretful situations, since they tend to eliminate the negative consequences induced by technology. This concept describes users' intention to change behavioral patterns by reducing usage intensity or even quitting social media platforms (Maier et al., 2015). The intensity of social media discontinuance behavior depends on the degree of users' resistance toward social media. Thus, we use users' social media apathetic behavior as a response in the research model.

## 2.5. Negative Internal State Process Toward Social Media

Internal psychological state causes individuals to decide what behavioral decisions they will make in the future (Frijda, 2005). According to Frijda (2005) emotional experience not only represents a perspective on emotional reactions but also contributes to the constitution of those reactions, notable with respect to attention shifts, action initiation, action guidance, and emotional regulation. In Frijda's emotional theory, individuals go through a perception step of the initial stimulus, and this perception affects the overall appraisal step, such as preference or non-preference for the object (Malhotra & Nair, 2016). Users experience psychological confusion when they are involuntarily exposed to social media disturbance, such as privacy invasion or overload. In the psychological literature, such a phenomenon is referred to as cognitive dissonance (Gbadamosi, 2009). According to Festinger, if a person cognition is inconsistent, he or she will experience the pressure of an aversive motivational state called cognitive dissonance (Festinger, 1987). Festinger further explained that cognitive dissonance can be seen as an antecedent condition which leads to activity oriented towards dissonance

reduction. Festinger postulated that dissonance is experienced as an unpleasant drive and, like other unpleasant drive states, needs to be reduce by avoiding contradictory information (Confirmation bias). Dissonance could arise from logical inconsistency, cultural norms, specific opinion and past experience (Festinger, 1987). Following the above theory, the cognitive dissonance theory is used to explain change in user's behavior (Midha & Ngafeeson, 2014). Festinger, proposed that, in other to eliminate dissonance it is advisable to change the action or feeling which the behavioral element represent. Going by this explanation, social media users who are psychologically uncomfortable will decrease the dissonance and avoid information that is likely to increase the dissonance. However, if the service provided by social media satisfies the users' needs or meets their expectations, the levels of cognitive resonance are raised (Riesmeyer, Hauswald & Mergen 2019; Devereux, Grimmer. L & Grimmer M 2019). According to Barbara Dautrich (2020), cognitive resonance is a state of harmony in which two ideas or concepts are compatible and fit well together. This means that social media users will continue to use social media services so far as it does not contradict their intentions or expectation.

This study therefore investigates the factors influencing users' loss of interest in social media given the influence of social media conflicts, considering both their social and individual aspects. Previous studies of social media withdrawal behavior mainly focused on the influence of the external environment or the characteristics of the system, ignoring the internal psychological state of social media users; thus, there seems to be a research gap between the initial adoption stage and the final intrusion stage of the social media apathetic usage.

## 3. Hypotheses Development

### 3.1. Social Conflict and User Cognition Toward Social Media

It has been proposed that social interaction is regarded as the main purpose for which individuals use and maintain their relationships through social media (Zhang et al., 2016). However, the risk of social media invasion and the stress which come from social media overload may conflict with prior expectation of using social media to relax. Such a feeling of being stressed due to receiving plenty of messages from friends or acquaintances, likewise sending too many messages to friends through social media than they want (Cho et al., 2016) might induce cognitive dissonance toward social media (Zhu & Bao, 2018; Curtis, Richard & John 1992).

As proposed by Xiao & Mou (2019), social comparison could be explained as an individual's need for self-evaluation. Also, Cramer et al. (2016) suggested that downward social comparison can have a positive effect, whereas social comparison can have negative outcomes. In the context of social media, Vogel et al. (2015) found that frequent users of social media engaged in upward comparisons more than downward comparisons, as abundant information about others' lives is easily available. The comparison process that occurs on social media can cause negative psychological states such as depression and anxiety (Lee et al., 2014). Individuals might thus feel relative deprivation if they look at the finest people who possess extraordinary capabilities (Smith & Pettigrew, 2011).

In addition, others report that it is painful to contact someone who has a successful social media profile. (Haferkamp and Krämer, 2011). Based on the discussion above, we believe that

the more that individuals are likely to participate in social comparisons and perceive greater social interaction overload, the more they are likely to experience cognitive dissonance toward social media. Thus, we hypothesize that:

*H1: Social interaction overload would have a decreasing effect on cognitive resonance.*
*H2: Social interaction overload would have an increasing effect on cognitive dissonance.*
*H3: Social comparison would have a decreasing effect on cognitive resonance.*
*H4: Social comparison would have an increasing effect on cognitive dissonance.*

## 3.2. Individual Conflicts and User Cognition Toward Social Media

Since the emergence of social media, it has been possible to track users' daily lives and other personal information disclosed on social media; thus, research has proposed that privacy is a concern for most social media users (Lohr, 2012). Social media users worry that others could violate their privacy by tracking their activities because some of the contents that they post can be used or collected in ways that they did not agree, thus making users to feel pressured and ultimately induce negative attitudes toward social media use (Shin, 2010).

Social media-life conflict is described as individuals' perception that their personal life is being invaded by social media use, which is linked with their work (van Zoonen et al., 2017). That is, it refers to a negative perception that social media play an excessive role in their daily life, a feeling of invasion into their daily life (Xiao & Mou, 2019). Due to the various advantages of social media, such as the possibility of being connected anywhere at any time, business colleagues can send work-related messages whenever they want, including outside office hours. Therefore, individuals must stay in touch with work and deal with work-related issues even during weekends or vacations. Social media-life conflict arises as individual are being connected to work related task during their personal time. Such conflict causes pressure and negative emotions, which leads to dissatisfaction toward social media (Gaudioso et al., 2017). Hence, we propose the following hypotheses:

*H5: Social media-privacy conflict would have a decreasing effect on cognitive resonance.*
*H6: Social media-privacy conflict would have an increasing effect on cognitive dissonance.*
*H7: Social media-life conflict would have a decreasing effect on cognitive resonance.*
*H8: Social media-life conflict would have an increasing effect on cognitive dissonance.*

## 3.3. User Cognition and User Resistance Toward Social Media

In the context of social media, if users perceive that the use of social media is below their expectations and they are dissatisfied or even regretful about it, this inconsistency or "lack-of-fit" of cognitions motivates the individuals to make a psychological effort to reduce the inconsistency between the cognitions, hence causing them to resist using social media, thereby reducing dissonance (Midha & Negafeeson, 2014). Thus, the social media stimuli that created stress and anxiety for the users will also increase their cognitive dissonance, thus affecting their resistance to social media.

On the other hand, Choi and Yoo (2015) reported that the higher the level of users perceived cognitive resonance for particular media, the higher the satisfaction with the media

and the positive effect on future performance. If the services provided by social media are consistent with individuals' expectations, the level of cognitive resonance of the users will be much higher (Wan, 2008). Thus, leading to continue use of social media. Thus, this study suggests the following hypotheses:

*H9: Cognitive dissonance has an increasing effect on user resistance.*
*H10: Cognitive resonance has a decreasing effect on user resistance.*

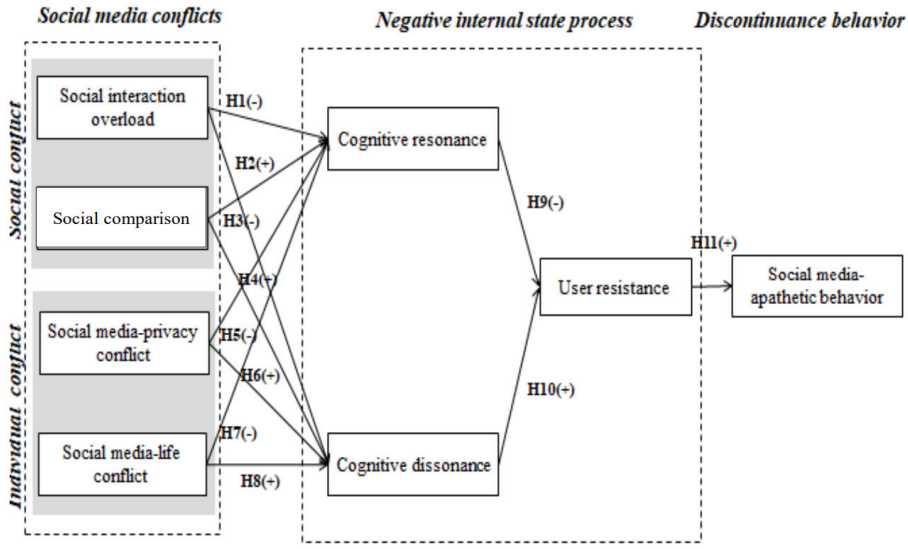
## 3.4. User Resistance and Social Media Apathetic Behavior

The emotional state of users according to the environmental stimuli of social media can be divided into user resistance as a negative aspect and emotional attachment as a positive aspect. User resistance was defined by Choi & Yoo (2015), as the psychological state or behaviors opposing innovations. User resistance can be decrease by affirming the positive performance and advantages of an innovation, which removes uncertainty and the potential risk involved in using the innovation (Featherman, 2003). According to diffusion innovation theory, a user is likely to adopt innovations when the uncertainty, complexity, compatibility, and observability of the innovation are resolved (Choi & Yoo, 2015). In contract, if the users perceive invasion and complexity of the innovation, the intention of resisting it would be strong. Bhattacherjee (2001) also argues that if users perceive the information system they use as unsatisfactory, they will gradually reduce or avoid using it.

Based on the above discussion, this study proposes the following hypothesis:

*H11: User resistance would have an increasing effect on social media apathetic behavior.*

**Fig. 2.** The Research Model



# 4. Methods

## 4.1. Sampling

This study aims to demonstrate how social media environmental stimuli, which include social-related stimuli and conflict-related stimuli, induce user cognition and user resistance, and then how they further influence users' social media apathetic behavior. For this purpose, respondents who represent social media users from China were selected as research targets based on their rich experience of using WeChat actively. These respondents were asked to answer the designed questions according to their general experience of using WeChat. For example, for social media privacy conflict, they were required to report their feelings about whether their private information could be traced easily because of their active use of WeChat.

Also, this study applied quota sampling reflecting gender, age, usage level, and occupation to collect a sample of social media users that relatively and accurately reflects the characteristics of the population. The quota sampling comprises of two steps. The first step was to select the city (Shenzhen) in China from which the survey was conducted. Shenzhen city is the most youthful city in China. This city was selected because it offers a rich experience of youth and social media. After selecting the city, the researchers conducted the second step which was to select respondents from the city. The researchers were able to distribute the questionnaire electronically using google forums to reach more people via sending direct messages with the survey link to respondents, through Kakotalk and also by sharing via WeChat. In order to motivate respondents, online coupons were presented as reward for their participation. A total of 315 questionnaires were distributed and 302 valid questionnaires were collected online.

## 4.2. Constructs and Measurement Items

This study constructed measurement items with reference to previous studies for each variable. The questionnaires were scored on a five-point Likert scale with anchors ranging from *strongly disagree* (= 1) to *strongly agree* (= 5). Besides four demographic variables, 24 items were designed for eight constructs. The measurement items were collected from different previous studies and modified to match the current research context appropriately, as shown in Table 1.

The items measuring social interaction overload were based on those developed by Cho et al. (2016). The measurements of social comparison were developed based on the concepts introduced by Lee et al., (2014). As a means of testing social media-privacy conflict, four questions were generated based on Yao and Cao (2017). Measurement items from Xiao and Mou (2019) were used to measure social media-life conflict. Cognitive dissonance was assessed by three items questions developed based on Sharifi & Esfidani (2014). Measurement items from Wan (2008) were used to measure cognitive resonance. Measurement items from Yoolee & Seongcheol (2009) were used to test user resistance. Finally, to measure social media apathetic behavior, concepts from Turel et al., (2014) were used.

**Table 1.** Measurement items

| Constructs | Measurement items | Researcher |
|---|---|---|
| Social interaction Overload | I usually receive too many messages from friends (or acquaintances) through WeChat.<br>I usually feel like I have to send many messages to friends through WeChat than I would want to send.<br>I feel that I generally get too many notifications of new postings, push messages, news feeds, etc., from WeChat while performing other tasks.<br>I often feel overload with communication from WeChat. | Cho et al. (2011) |
| Social comparison | When I am on the WeChat application, I always pay a lot of attention to how I do things compared with how others do things.<br>On the WeChat application, I often compare myself with others concerning what I have accomplished in life.<br>If I want to learn more about something, I always try to find out what others on WeChat think about it. | Lee et al., (2014) |
| Social media-privacy conflict | I usually feel uncomfortable that my use of WeChat can be easily monitored.<br>I usually feel my privacy can be compromised because my activities on WeChat can be traced.<br>I usually feel my employer could violate my privacy by tracking my activities on WeChat<br>I usually feel that I have to give too much information to WeChat. | Yao & Cao (2017) |
| Social media-life conflict | Using WeChat always blurs boundaries between work and my home life.<br>I usually have to keep in touch with work even during vacation because of WeChat.<br>I usually have to sacrifice my vacation and weekend time to keep myself updated on new WeChat messages of feeds.<br>I usually feel my personal life is being invaded because of WeChat | Xiao & Mou (2019) |
| Cognitive dissonance | I am extremely dissatisfied with WeChat in general.<br>I regret using WeChat in general.<br>WeChat is sometimes below my expectations. | Sharifi & Esfindani. (2014) |
| Cognitive resonance | WeChat offers services that are consistent with my expectations generally.<br>WeChat is in harmony with what I wish to achieve from using it in general.<br>WeChat offers services that are congruent to my needs in generally. | Wan (2008) |
| User resistance | I am dissatisfied with WeChat, as such I do not like to use its services<br>I do not like using WeChat because its overall services have not improved.<br>I generally regret using WeChat | Yoolee & Seongcheol (2009) |
| Social media apathetic behavior | WeChat makes me think of decreasing my time of usage generally.<br>WeChat makes me want to use the service less frequently in general.<br>WeChat no longer draws my interest overall. | Turel et al., (2014) |

# 5. Findings

## 5.1. Sample Characteristics and Correlations

A total of 315 questionnaires were distributed, of which 302 were valid questionnaires for use in this study. According to the sample statistics, the gender difference was not large, with 145 male (48%) and 157 female (52%) participants. As for the age structure of the sample, 132 (43.7%) of the participants were aged between 20 and 29, 82 (27.1%) between 30 and 39, 63 (20.9%) from 40 to 49, and 25 (8.3%) over 50. The average daily time spent on social media was between 1 and 3 hours for 146 (48.3%) participants, followed by 30 minutes to less than 1 hour for 77 (25.5%) participants, more than 3 hours for 63 (20.9%) people, and less than 30 minutes for 24 (7.9%) participants.

The characteristics of the sample are summarized in Table 2.

**Table 2.** Demographic characteristics

| Item | Characteristics | Frequency | Ratio |
|---|---|---|---|
| Gender | Male | 145 | 48.0% |
| | Female | 157 | 52.0% |
| | Total | 302 | 100% |
| Age | 20–29 | 132 | 43.7% |
| | 30–39 | 82 | 27.1% |
| | 40–49 | 63 | 20.9% |
| | Over 50 | 25 | 8.3% |
| | Total | 302 | 100% |
| Time spent on social media (day) | Less than 30 min | 24 | 7.9% |
| | 30 min–1 hour | 77 | 25.5% |
| | 1 hour–3 hours | 146 | 48.3% |
| | More than 3 hours | 55 | 18.3% |
| | Total | 302 | 100% |
| Occupation | Student | 152 | 50.3% |
| | Official | 81 | 26.9% |
| | Self-employed | 42 | 13.9% |
| | Other | 27 | 8.9% |
| | Total | 302 | 100% |

The correlations among constructs and their mean scores and standard deviations are shown in Table 3. In order to measure the correlation among construct, a Pearson correlation test was performed.

**Table 3.** Correlations among constructs

| Constructs | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| (1) | 1 | | | | | | | |
| (2) | .148* | 1 | | | | | | |
| (3) | .215** | .059 | 1 | | | | | |
| (4) | .122* | .034 | .223** | 1 | | | | |
| (5) | .452** | .151** | .331** | .195** | 1 | | | |

**Table 3.** (Continued)

| Constructs | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| (6) | −.410** | −.023 | −. 194** | −. 106** | −. 221** | 1 | | |
| (7) | .638** | .145* | .218** | .162** | .470** | −. 274** | 1 | |
| (8) | .278** | .085 | .090 | .125* | .235** | −.198** | .333** | 1 |
| Mean | 2.480 | 2.631 | 2.725 | 2.633 | 2.639 | 3.405 | 2.556 | 2.909 |
| *SD* | 1.001 | 1.011 | .910 | .868 | .801 | .820 | .887 | .996 |

(1) Social interaction overload (2) Social comparison (3) Social media-privacy conflict (4) Social media-life conflict (5) Cognitive dissonance (6) Cognitive resonance (7) User resistance (8) Social media apathetic behavior.

**Note:** $^{**}p < 0.05$, $^{*}p < 0.1$.

## 5.2. Measurement and Validation

To examine the reliability and validity of the measurement items developed in the analysis, confirmatory factor analysis (CFA) was conducted using the SPSS 25.0 statistical program and the AMOS statistical package.

The criteria for the evaluation include: the composite reliability (CR), which should be at least 0.7 (Chin, 1998); the average variance (AVE) of the extraction, which should be at least 0.4 and preferably greater than 0.5 (Chin, 1998); and all project loads should be greater than 0.7 (Barclay et al., 1995). As shown in Table IV, the composite reliability ranges from 0.722 to 0.903, and the values of average variance extracted also met the requirement of exceeding 0.40, being from 0.483 to 0.757. From the result, the convergent validity of the measures used in the study was established.

In addition, Hair et al. (1998) suggested that loadings over 0.30 are minimally acceptable, those over 0.40 are regarded as more important, and those over 0.50 are practically significant. Thus, in this study, all the loadings appear to be significant.

Since inter-correlations between some constructs are relatively high, common method bias may exist. In order to detect this, a discriminant validity test was performed in accordance with (Fornell and Lacker, 1981), one of the more statistically rigorous methods of doing so. In this test, the squared correlations between two constructs must be lower than the corresponding AVE. Table IV shows that the AVE figures, ranging from 0.483 to 0.757, all exceed the squared correlations between the eight constructs, the highest of which is 0.407, confirming discriminant validity of the proposed constructs. Thus, the eight constructs possess adequate convergent and discriminant validity for further SEM analysis.

**Table 4**. CFA results

| Constructs | Items | Factor Loading | SE | Std. Loading | *t*-value | CR | AVE |
|---|---|---|---|---|---|---|---|
| Social interaction overload | SO1 | 1.000 | - | .782 | - | 0.869 | 0.689 |
| | SO2 | 1.016 | .055 | .746 | 18.485*** | | |
| | SO3 | .932 | .054 | .662 | 17.163*** | | |
| Social comparison | UC1 | 1.000 | - | .678 | - | 0.839 | 0.635 |
| | UC2 | .948 | .062 | .686 | 15.184*** | | |
| | UC3 | .986 | .064 | .710 | 15.354*** | | |

**Table 4**. (Continued)

| Constructs | Items | Factor Loading | SE | Std. Loading | *t*-value | CR | AVE |
|---|---|---|---|---|---|---|---|
| Social media-privacy conflict | IP1 | 1.000 | - | .557 | - | 0.898 | 0.688 |
| | IP2 | 1.125 | .075 | .721 | 14.934*** | | |
| | IP3 | 1.233 | .079 | .795 | 15.677*** | | |
| | IP4 | 1.169 | .078 | .730 | 15.035*** | | |
| Social media-life conflict | IL1 | 1.000 | - | .691 | - | 0.903 | 0.700 |
| | IL2 | 1.022 | .058 | .748 | 17.585*** | | |
| | IL3 | .953 | .057 | .695 | 16.768*** | | |
| | IL4 | .796 | .050 | .639 | 15.827*** | | |
| Cognitive dissonance | CD1 | 1.000 | - | .695 | - | 0.722 | 0.483 |
| | CD2 | 1.045 | .088 | .673 | 11.831*** | | |
| | CD3 | .569 | .085 | .371 | 6.654*** | | |
| Cognitive resonance | CR1 | 1.000 | - | .509 | - | 0.862 | 0.677 |
| | CR2 | 1.308 | .102 | .699 | 12.774*** | | |
| | CR3 | 1.289 | .100 | .722 | 12.850*** | | |
| User resistance | UR1 | 1.000 | - | .752 | - | 0.768 | 0.543 |
| | UR2 | 1.056 | .071 | .794 | 14.820*** | | |
| | UR3 | .514 | .067 | .301 | 7.692*** | | |
| Social media apathetic behavior | TU1 | 1.000 | - | .840 | - | 0.903 | 0.757 |
| | TU2 | .983 | .042 | .840 | 23.426*** | | |
| | TU3 | .969 | .049 | .682 | 19.686*** | | |

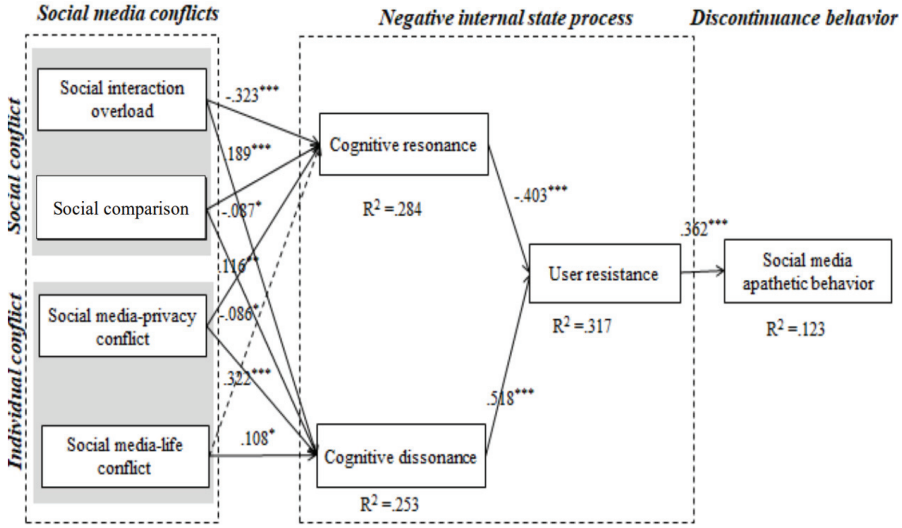
**Note:** $^{***}p < 0.01$.

## 5.3. Hypotheses Test Findings

This study used the structural equation modeling (SEM) performed by AMOS to verify the research model. Generally speaking, the suitability of a model can be identified when all fitting indexes meet the criteria as follows: The significance level associated with the ratio of chi-square ($\chi^2$)/degree of freedom is less than 3, the goodness of fit index (GFI), comparative fit index (CFI), normed fit index (NFI), and incremental fit index (IFI) are greater than 0.9, the adjusted goodness of the fit index (AGFI) is greater than 0.8, and the root mean square error of approximation (RMSEA) value is between 0.05 and 0.08.

The results for the standardized path coefficients, *t*-values, and coefficients of determination of latent variables are shown in Figure 3 and are as follows: $\chi^2 = 1478.295$, $df = 916$, GFI = .844, AGFI = .823, NFI = .886, CFI = .951, IFI = .953, and RMSEA = .043. The $R^2$ for cognitive resonance and cognitive dissonance was 28.4% and 25.3%, respectively, while that for user resistance was 31.7% and for social media apathetic behavior was 12.3%. Thus, this study considers the model to be valid. (View Fig. 3)

**Fig. 3.** Causal effects among the constructs




**Note:** $^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$
$\chi^2 = 1478.295$, $df = 916$, GFI = .844, AGFI = .823, NFI = .886, CFI = .951, IFI = .953, RMSEA = .043.

As shown in Table 5, 11 of the proposed hypotheses were supported, and social media-life conflict was shown to have no connection with users' cognitive resonance.

Among the selected social media conflict creators, both social conflict and individual conflict, influencing cognitive resonance, were proved meaningful, except for social media-life conflict. Therefore, Hypotheses 1, 3, and 5 were supported, while Hypothesis 7 was rejected. Among these meaningful factors, the coefficients for social-related conflict, which included social interaction overload ($\beta = -.323$, $p < 0.01$) and social comparison ($\beta = -.087$, $p < 0.1$), had relatively greater absolute values than social media-privacy conflict ($\beta = -.086$, $p < 0.1$), which means that social-related conflict, especially social interaction overload, had powerful effects on cognitive resonance.

As for the factors influencing cognitive dissonance, all of them had significant effects. This suggests that Hypotheses 2, 4, 6, and 8 were supported. Similarly, among these meaningful factors, social media-privacy conflict was found to have the highest coefficient ($\beta = .322$, $p < 0.01$), followed by social interaction overload ($\beta = .189$, $p < 0.01$), social comparison ($\beta = .116$, $p < 0.05$), and social media-life conflict ($\beta = .108$, $p < 0.1$), which means that social media-privacy conflict had the greatest effect on users' cognitive dissonance according to social media.

Regarding the relationship between user cognition and user resistance, cognitive resonance was proven to have a negative influence on user resistance ($\beta = -.403$, $p < 0.01$), whereas cognitive dissonance was proven to have a positive influence on user resistance ($\beta = .518$, $p < 0.01$); cognitive dissonance had a much higher effect coefficient than cognitive resonance on user resistance, which means that users' negative perception of social media had a greater influence on user resistance. As a result, Hypotheses 9 and 10 were supported.

Lastly, user resistance was found to have a positive influence on users' social media apathetic behavior ($\beta = .362$, $p < 0.01$). Therefore, Hypothesis 11 was supported.

Overall, among the social media, social interaction overload had a much higher coefficient for its effect on user cognitive resonance of WeChat than individual-related conflict, whereas individual conflict had a higher coefficient on the cognitive dissonance of WeChat than social conflict.

**Table 5.** Path Analysis

| | Path | Coef. | Result |
|---|---|---|---|
| H1 | Social interaction overload → Cognitive resonance | −.323*** | Supported |
| H2 | Social interaction overload → Cognitive dissonance | .189*** | Supported |
| H3 | Upward social comparison → Cognitive resonance | −.087** | Supported |
| H4 | Upward social comparison → Cognitive dissonance | .116** | Supported |
| H5 | Social media-privacy conflict → Cognitive resonance | −.086* | Supported |
| H6 | Social media-privacy conflict → Cognitive dissonance | .322*** | Supported |
| H7 | Social media-life conflict → Cognitive resonance | - | Not Supported |
| H8 | Social media-life conflict → Cognitive dissonance | .108* | Supported |
| H9 | Cognitive resonance → User resistance | −.403*** | Supported |
| H10 | Cognitive dissonance → User resistance | .518*** | Supported |
| H11 | User resistance → Social media apathetic behavior | .362*** | Supported |

## 6. Discussion and Implication

The social purpose was shown by many studies to be the most important motive for users to use social media. According to Shokouhyar et al. (2018), meeting their social needs is the initial expectation of the users, that is, the social factor has a much stronger connection with users' cognitive resonance in terms of social media than other factors. Also, Chinese society is characterized by collectivism, *guan xi* culture; thus, users must use social media to meet many social interactions needs (Xiao & Mou, 2019).

On the other hand, as social media grow, the issue of social media-privacy conflict has become even more important (Bright et al., 2015). Our result is consistent with Yao and Cao (2017), who proposed that social media-privacy conflict could significantly influence users' apathy behavior. Especially in China, where WeChat is not only regarded as a social tool; but also, as a work-related tool.

The current study focused on the enablers of Chinese social media users' apathetic behavior. It adopted the social media conflict perspective, which includes social-related conflict and individual conflict, which are found to influence users' internal states toward social media and further induce social media apathetic behavior.

Previous research has mostly focused on social media continuance usage due to its benefits, whereas the research on social media apathetic behavior is relatively limited. This study explored social media apathetic behavior to fill this gap and provide a new perspective for social media providers. For instance, scholars have proposed various enablers from the external environment for social media apathetic behavior, such as social media characteristics

and system features (e.g., Lim & Yang, 2015; Maier et al., 2012). Only a few studies have provided a view of the internal psychological process that leads to social media apathetic behavior. This study is among the first to address that issue. This study focuses on the influence of both external social media conflict and internal state on social media apathetic behavior, where internal state refers to users' cognitive dissonance and cognitive resonance, and the relationship between the users' cognition and their resistance was explored. During the internal emotional process, it was found that a negative attitude and cognitive dissonance had a much higher influence on user resistance than cognitive resonance, which further induce social media apathetic behaviors. Therefore, the results of this study show how important it is for users to be provided services that are consistent with their expectations for future acceptance behavior.

Lastly, regarding social media conflicts, which include social-related conflict and individual conflict, it was found that social-related conflict has a significantly greater negative influence on cognitive resonance, whereas individual-related conflict had a stronger relationship with cognitive dissonance. Given that socializing is the main reason for individuals to use social media, social factors have a much higher connection with cognitive resonance. Also, social comparison is common on social media; users not only use social media to socialize with others but also compare themselves with others online (Cramer et al., 2016). However, previous studies have mainly explored the relationship between social comparison and positive outcomes, such as self-improvement; little research has regarded social comparison as a factor determining social media apathetic behavior, and our empirical results indicate that social comparison should not be ignored in future research.

Moreover, our results are consistent with Yao and Cao (2017), who proposed that social media-privacy conflict significantly influences social media apathetic behavior. Considering that WeChat is also used for work communication in China, the issues of social media-privacy and life conflict were found to be serious.

According to the findings, we present the following managerial implications. Firstly, this study proposed that social related conflict has a higher negative influence on WeChat users than individual related conflict. This implies that maintaining social relationship through the use of social media increases social contacts and connections which results in negative consequences such as stress and anxiety. Such feeling of stress is associated with depression and a sense of fatigue which induces users to reduce their activities on social media. Second, individual conflict was proven to have a strong positive influence on cognitive dissonance than social conflict. Therefore, this implies that users will feel uncomfortable when using social media because they worry others can easily violate their privacy by tracking their activities. The fact that social media has the possibility to track user's daily lives and other personal information, this would make users feel pressured and ultimately induce negative attitude towards social media use. Third, between cognitive dissonance and cognitive resonance, cognitive dissonance has the strongest influence on user resistance. Therefore, individuals who are involuntarily expose to social media stimuli (invasion) will experience stress and anxiety that would induce social media avoidance.

Furthermore, user's resistance has a positive influence on user's social media apathetic behavior. This implies that if social media users perceive invasion and complexity in the innovation of a social media platform (WeChat), they will gradually reduce or avoid using it.

## 7. Limitations and Future Research

The limitations of this study may be summarized as follow.

First, the features of the sample selected for this study might have influenced the results of the research. The participants were all from China; given that China is characterized by collectivism and *guan xi* culture, the needs for socializing might be much higher than in individualistic societies, which might have influenced the final results to some extent. Therefore, future research should investigate other countries with collectivist culture (South Korea, Japan) and individualistic cultures (USA, Germany, Africa, Germany and Australia). Furthermore, different social media platforms might have different effects on apathetic behaviors. In this study, we only examined WeChat; thus, future research should select other social media as research objects, such as Kakao story, Naver Band, Daum Café.

Second, half of the participants were students. Although the population characteristics of our sample are similar to those of general social media users, the results may be different depending on the occupation of the participants. For instance, employees may be more sensitive than students to the conflict between social media and their privacy and daily life. Further research should select a more diverse and larger sample.

Furthermore, in this study, social media conflicts were explored only from the individual and social perspectives; as the factors determining social media apathetic behavior are not limited to these, future research should explore other factors, such as complexity and uncertainty.

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