

THE INFLUENCE OF SOCIAL MEDIA MOTIVATION AND PARASOCIAL INTERACTION ON ATTITUDINAL AND BEHAVIORAL ENGAGEMENT AMONG SOCIAL MEDIA USERS

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ABSTRACT

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This study had two main purposes: to explore the relationships between social media motivation, parasocial interaction, and attitudinal and behavioral engagement, and to investigate any differences in gender and age group responses in terms of parasocial interaction. Survey research was used to study participants' social media motives and behaviors. This study used purposive sampling to gather the data from social media users who used social media platforms and followed their favorite media figures on one of the social media, which included Facebook, Instagram, YouTube, Twitter, and Line. The total number of participants was 744. Overall, the results indicated the reasons people use social media the most were as follows: relationship maintenance, relaxation, new friendship, to pass time, entertainment, and peer influence. In addition, the results showed that those who used social media for relationship maintenance, relaxation, to pass time, entertainment, peer influence, and parasocial interaction were more likely to have attitudinal engagement with their favorite media personalities. Moreover, those who used social media for relaxation, entertainment, peer influence, and parasocial interaction were more likely to have behavioral engagement with their favorite media personalities. The results also indicated that younger groups were more likely to engage in parasocial interaction than those who were older. However, there were no gender differences found with regard to parasocial interaction.

Keywords: Social media motivation; parasocial interaction; attitudinal engagement; behavioral engagement; demographics

1. INTRODUCTION

Social media provides powerful platforms for people to communicate, connect, interact, and build relationships with others. It allows users to generate the content, which can promote social connectedness and collaboration among social media users, media figures, and organizations. Social media such as social networking sites, online communities, and blogs, offer people various activities: communicating and building relationships with social community, collecting and publishing works, access to social entertainment, and social commerce (Kaplan and Haenlein, 2010; Tuten and Solomon, 2013).

Social media usage has been widespread around the world. The evidence shows that there are approximately 3.8 billion social media users worldwide with 49% penetration rate (as of January 2020) (We Are Social and Hootsuite, 2020). In Thailand, the number of Internet users is increasing gradually; there are 57 million Internet users with 82.2% penetration rate (as of June, 2019) (Internet World Stats, 2019).

Indeed, social media offers users a feeling of personal interaction and connection. Through social media, people can follow and subscribe to their favorite media characters (e.g., celebrities, actors, bloggers, and vloggers) to keep up with their work and lives. Parasocial interaction between media audiences and media figures can occur via social media. Parasocial interaction (PSI) refers to an illusionary experience between media audiences and media personalities as if they are involved in a reciprocal interaction (Horton and Wohl, 1956). The study of parasocial interaction and its media effects has been widely investigated in traditional and new media contexts (e.g., Gong and Li, 2017; Hwang and Zhang, 2018; Rasmussen, 2018; Rubin and McHugh, 1987; Rubin and Perse, 1987; Rubin et al., 1985; Rubin and Step, 2000).

1.1 Rationale for the study

Past research on parasocial interaction and media effects has extensively investigated traditional media contexts. For example, the parasocial interaction (PSI) scale was developed to measure PSI with newscasters (Rubin et al., 1985). Moreover, some studies explored the relationships among media motivation, PSI, and media effects (Conway and Rubin, 1991; Rubin and Step, 2000), and Loneliness and PSI (Wang et al., 2008). In recent years, research has explored PSI in newer media contexts. Stever and Lawson (2013) studied PSI and how celebrities use twitter to communicate with their fans. Lee and Watkins (2016) explored PSI with YouTube vloggers, particularly the influence attractiveness, PSI, brand perceptions and purchase intentions. Yuksel and Labrecque (2016) studied PSI in social media platforms and consumers' cognitive, affective, and behavioral effects. Gong and Li (2017) examined the role of PSI and celebrity endorsement effectiveness.

Indeed, there are growing numbers of social media users, and social media have increasingly played a crucial part in people's lives. Rubin (2016) suggested that media differ in their parasocial potential, which may lead to different parasocial relationships. Social media enable more parasocial interaction compared to traditional media communication. Social media applications have the ability to invite parasocial interaction because they can make audiences more involved with media personalities and contents. Social media users can get closer to their favorite media figures through their online interactions more easily and conveniently. The interaction between media figures and social media users is evident. The question is whether or not people's media motivation and parasocial interaction affect their social media engagement regarding emotion and behavior.

The empirical evidence on the interrelationships among social media motivation, parasocial interaction, and social media effects is currently insufficient to draw firm conclusions. In Thailand, most studies have investigated parasocial interaction in the traditional media contexts, and interpersonal communication (e.g., Suwannachote and Kaewthep, 2009; Vichitakul and Cheyjanya, 2003). The empirical evidence of the relationships among these variables is still missing. The study of the linkage among social media motivation, parasocial interaction, and social media engagement is promising. The variable relationships need more academic attention to understand the importance of parasocial interaction between media users/audiences and media personalities through social media usage. These online interactions could affect users' attitudes, behaviors, and well-being.

1.2 Purposes of the study

This study was undertaken with two main purposes. First, it investigated the interrelationships among variables including social media motivation, parasocial interaction, and attitudinal and behavioral engagement. Second, it sought to investigate any differences in gender and age group in terms of parasocial interaction. Based on the uses and gratifications perspective (U&G), the present study was to explore social media motivation, usage, and outcomes of using media. According to U&G, people are active and goal-directed in using the media. They differ in their media motivation and usage, which will affect their media choices and behaviors (Katz et al., 1973).

This study was aimed to provide a better understanding of the role of social media interactions and consequences. The contributions of the study to the academic area involve the extension of a body of knowledge for the study of parasocial interaction and its effects in online settings. Past research typically has examined parasocial interaction in traditional media settings such as television and radio (Conway and Rubin, 1991; Rubin and Step, 2000). Specifically, the findings of this study add to the literature of social media, parasocial interaction, and its effects. Moreover, this study applied U&G to explain active audience in using social media and the consequences. This should help us understand the overall pattern of social media motivation, parasocial interaction, and attitudinal and behavioral engagement.

In practical terms, the present study provides crucial information for business in many areas, including communication and marketing, to comprehend the online interactions between consumers/audiences and media figures, personas, and celebrities, and the influence of media figures on the communication and marketing outcomes (cognitive, attitudinal, and behavioral outcomes). In addition, the empirical evidence from the study might benefit Thai society for a better understanding of the patterns of social media usage and the effects of online interactions and relationships.

2. USES AND GRATIFICATIONS THEORY

The uses and gratifications theory (U&G) explain how active audiences use media to satisfy their needs. People's needs and motives affect their media usage and outcomes (Katz et al., 1973). The theory highlights how and why individuals use media rather than how media affect people (Klapper, 1963). Developing from a psychological communication perspective, the main premise of U&G is as follows: First, individuals are active and goal-directed in choosing media. Second, they choose the suitable communication channels to fulfill their needs. Third, they differ in communication behaviors depending on social and psychological factors. These factors affect how media can gratify individuals' needs. Fourth, media can be functional alternatives to other modes of communication. Finally, individuals are typically more powerful than media, but not always (Rubin, 2009).

The uses and gratifications theory is appropriate to explain media motivation and the active role of audiences in new media settings. U&G has been widely used to investigate various topics: new media uses and effects (Dumrongsiri and Pornsakulvanich, 2010b; Flaherty et al., 1998; Kim and Haridakis, 2009; Pornsakulvanich et al., 2008; Sun, 2008); motivation for using the Internet (Charney and Greenberg, 2002; Pornsakulvanich, 2007; 2010; 2017a); social networking sites (Dumrongsiri and Pornsakulvanich, 2010b; Pornsakulvanich and Dumrongsiri, 2013).

2.1 Social media motivation

Motivation is one of the crucial keys to understand media orientations and usage. According to uses and gratifications, individuals are active in their media selection and consumption (Katz et al., 1973). Moreover, Rubin (2009) emphasized that motives represent interrelated personal structures or multifaceted viewing orientations. These complex viewing orientations, whether people use the media to fulfill their information seeking, or relaxation, would suggest the amount and type of media use, and about media attitudes and behaviors. For example, ritualized use is less active in media consumption, and may employ the medium for entertainment or relaxation, while instrumental use is more active in media consumption, and may use the medium for information searching or more rational purposes.

In this study, social media motivation refers to the reasons that people use social media to fulfill their felt needs. Media motivation has been widely studied in the area of media uses and effects. Scholars have explored motivation for using numerous types of new media and social media, such as social networking sites (Dumrongsiri and Pornsakulvanich, 2010b; Pornsakulvanich and Dumrongsiri, 2013; Ross et al., 2009) and the Internet (Kim and Haridakis, 2009; Pornsakulvanich, 2017a). For example, prior research found six Internet motives: habitual entertainment, caring for others, control, economical information seeking, excitement, and escape (Kim and Haridakis, 2009). Dumrongsiri and Pornsakulvanich (2010b) reported seven motives to use social networking sites: new friendship, relationship maintenance, entertainment, self-expression, passing time, peer influence, and in trend.

Media motivation is also linked to media usage and behaviors. Prior studies found an association between Internet motives and Internet dependency (Sun, 2008) and Internet addiction (Kim and Haridakis, 2009). For instance, Sun (2008) indicated that interpersonal utility motive and pass time motive explained interaction involvement and media involvement. Kim and Haridakis (2009) found an association between Internet motives and Internet addiction. In addition, the social networking site motivation has suggested different social networking site use. Pornsakulvanich and Dumrongsiri (2008) revealed that people who used social networking sites for relaxation were more likely to spend more time using Facebook.

Through the uses and gratifications lens, the present study explains the role of social media audience interaction and activity. Social media are typically interactive, and allow people to be active in choosing favorite media contents and platforms to fulfill their needs. However, people use social media to fulfill their felt needs differently. U&G underscores people's needs and motives to communicate, media usage, and consequences of people's behaviors (Rubin, 2009).

2.2 Parasocial interaction

Parasocial interaction (PSI) was initially proposed by Horton and Wohl (1956) to define the relationship between media audiences and television and radio personalities. They suggested that media personalities encourage an illusionary parasocial relationship with media audiences. PSI is a sense of friendship with media characters. Media audiences can feel an affective relationship with the media character and feel like they are familiar (Rubin and Perse, 1987). Also, media audiences can feel positive with the media personae and think that the personae are natural and down-to-earth (Rubin et al., 1985).

Researchers have examined PSI for decades. The concept was first introduced in a paper by Horton and Wohl (1956). At first, the concept was not widespread, until the advent of the uses and gratifications approach in the early 1970s (Giles, 2002). In an initial study, Levy (1979) studied older adults and local television news and constructed a scale to measure strength of PSI with local newscasters. Rubin et al. (1985) developed the 20-item PSI scale to measure PSI and local television news viewing. In a later study, Rubin and Perse (1987) adapted the PSI scale (Rubin et al., 1985) by reducing the scale into a 10-item system to measure variables related to television soap operas. The present study adapted the 10-item PSI scale (Rubin and Perse, 1987) to examine parasocial interaction with media personalities via social media.

Parasocial interaction is related to the study of personal involvement in media uses and effects. The concept underscores the role of media characters in the perceived relationships with media audiences (Rubin, 2009). Also, PSI emphasizes the link of interpersonal concepts such as attraction to understanding the influence of newer media technologies. Media audiences can perceive media personalities as their friends, seeing them as attractive, natural, and down-to-earth, and holding similar attitudes and values (Rubin, 2009).

In this study, parasocial interaction means a media user's feeling of interpersonal involvement with a media personality/figure via social media. Through online interactions, social media users may feel connected to one of their favorite media personalities. Importantly, the evidence showed that PSI was associated with attitudinal and behavioral outcomes (Men and Tsai, 2013). Accordingly, an audience's perceived involvement with a favorite media personality may affect his/her attitudes and behaviors.

2.3 Outcomes of social media use

According to uses and gratifications, outcomes of media use are affected by media motivation and media use (Katz et al., 1973). The present study focused on social media engagement as the outcomes of social media use. Social media engagement consists of attitudinal and behavioral engagement. Attitudinal engagement reflects a feeling that the social media personality affects a person's views on issues, values, and attitudes. Behavioral engagement refers to a feeling that the social media personality affects a person's behaviors.

Scholars have suggested that outcomes of media use could be cognitive, affective, and behavioral outcomes (Rubin, 2009; Pornsakulvanich, 2017b; Pornsakulvanich et al., 2008). Prior studies indicated that media outcomes were associated with media motivation and media use (e.g., Dumrongsi and Pornsakulvanich, 2010a; Kim and Haridakis 2009; Sun, 2008).

Regarding PSI and its effects, research has indicated the relationships among media motivation, PSI, and media effects (Rubin and Step, 2000), and PSI and social media effects (Gong and Li, 2017; Lee and Watkins, 2016; Men and Tsai, 2013; Rasmussen, 2018; Yuksel and Labrecque, 2016). For example, Lee and Watkins (2016) found that PSI affected brand perceptions and brand purchase intention. Hence, in this study, we expected that social media users' engagement may be affected by social media motivation and parasocial interaction.

3. LITERATURE REVIEW

3.1 Social media motivation, parasocial interaction, and social media engagement

Previous studies revealed the link between media motives and parasocial interaction (PSI) (e.g., Conway and Rubin, 1991; Kim and Rubin, 1997; Rubin and Step, 2000). For example, Conway and Rubin (1991) explored PSI and TV viewing motivation and found that PSI was associated with pass time, entertainment, information, and relaxation viewing motives. Kim and Rubin (1997) found information, exciting entertainment, and social utility motives predicted PSI with soap opera characters. Spinda et al. (2009) indicated that PSI among NASCAR fans was positively related to involvement, affinity, and intentionality. Fans with high PSI offered more personal support for their favorite driver's corporate sponsor. Sun (2008) found that interpersonal utility motive was negatively associated with interaction involvement, but positively related to cognitive media involvement.

Some studies have indicated relationships between media motives, parasocial interaction, and media effects (e.g., Baek et al., 2014; Rubin and Step, 2000). For instance, Rubin and Step (2000) found that

information and pass time motives, task attraction, and PSI positively predicted radio listeners' attitudes and views on societal issues, while information and pass time motives and PSI positively predicted behavioral effects (e.g., following a media figure's advice).

Recent research has investigated PSI in online settings. Ko et al. (2015) revealed social networking site usage was related to parasocial relationships. Some studies found relationships between PSI and its antecedents. For example, Liu et al. (2019) indicated that entertainment motivation, relationship building motivation, and time spent on vlogs were positively related to PSI.

Numerous studies found associations between PSI and social media effects (e.g., Lee and Watkins, 2016; Yuksel and Labrecque, 2016). Yuksel and Labrecque (2016) used observational netnographic data on the twitter account and in-depth interviews. They found that PSI was related to consumer's cognition, affection, and behavior. Moreover, Lee and Watkins (2016) investigated the influence of video vlogs and PSI on perceptions and purchase intentions. They revealed that PSI with vloggers could enhance positive luxury brand perceptions and purchase intentions.

Along the same line, Djafarova and Rushworth (2017) examined the influence of social media figures (e.g., celebrities, YouTubers, and bloggers) via Instagram on behavioral outcomes. They found that social media figures positively predicted the purchase behaviors of young female users. Also, parasocial relationships positively predicted followers' purchase and eWOM (word of mouth) intentions (Hwang and Zhang, 2018). Moreover, Lookadoo and Wong (2019) found that media figure relationships positively predicted both attitudes and intentions to purchase products.

Another study investigated the associations among media characters, PSI, and brand attitudes and found positive associations among positively represented characters, PSI, and brand (Knoll et al., 2015). Baek et al. (2014) investigated how attachment style and SNS motives affected consequences of SNS use. They found the relationships between attachment styles, SNS motives, and consequences of using SNS including PSI and satisfaction. Ding and Qiu (2017) also indicated that the intensity of users' celebrity-following activities on microblogging platforms positively predicted the effectiveness of celebrity endorsement. Finally, past research revealed that PSI positively predicted community satisfaction, which were attitudinal responses toward online travel community experiences (Choi et al., 2019).

In sum, the literature review suggests relationships between PSI and its antecedents and PSI and its consequences. However, the empirical evidence on the associations among social media motivation, PSI, and social media effects was inadequate. Thus, the present study sought to find out more about the interrelationships among these variables.

3.2 Demographics and parasocial interaction

People shape their own media experiences (Rubin and Perse, 1987). Those in different age groups and gender may use social media to fulfill their needs of social interaction differently. Some may prefer using social media for communication and interaction. Rubin and Perse (1987) suggested that parasocial relationship might be functional alternatives to interpersonal communication. Thus, the demographic variables are crucial for the study of parasocial interaction, and media uses and effects.

There is insufficient empirical evidence on the impact of demographic factors and PSI in online settings. Past research revealed that older adults engaged in PSI with their local television newscasters (Levy, 1979). Another study examined older adults' (60 years and older) TV home shopping and found a positive effect of PSI and perceived convenience on satisfaction with TV shopping (Lim and Kim, 2011).

Some studies have indicated associations between demographic factors and PSI. For instance, Wang et al. (2008) examined gender, types of loneliness, and PSI with TV characters. They found that women would increase their PSI when family loneliness increased. In contrast, men would enhance their PSI when chronic loneliness increased. Another study (Gleason et al., 2017) examined early adolescents and their parasocial interaction with media personalities. They found gender differences in relationship types selected by adolescents. Boys were more likely to experience PSI with media figures who were athletes than girls. Girls were more likely to experience PSI with those who were celebrities than boys. In addition, Spinda et al. (2009) indicated that female NASCAR fans would exhibit higher overall PSI than male fans. Female fans were more parasocially attached than male fans. Also, Bond (2016) examined adolescents' social interactions with their preferred media personalities on Twitter and found that females had stronger parasocial relationships than male adolescents.

Based on literature review, we posed hypotheses and research questions to explore the associations among media motivation, parasocial interaction, attitudinal and behavioral engagement, and demographic factors and parasocial interaction.

H1a: Social media motivation and parasocial interaction predict attitudinal engagement.
H1b: Social media motivation and parasocial interaction predict behavioral engagement.

RQ1: Are there differences between genders in terms of parasocial interaction?

RQ2: Are there differences in age groups in terms of parasocial interaction?

4. METHODS OF THE STUDY

The current study used a cross-sectional design to study the predictive relationships among social media motivation, parasocial interaction, and attitudinal and behavioral engagement. We used survey research to obtain data to test variable relationships and used purposive sampling to acquire the data from participants who were social media users and had experienced parasocial interaction with a media personality via one of several types of social media (i.e., Facebook, Instagram, YouTube, Twitter, or Line) during the past three months.

4.1 Sample size

The sample size was estimated based on Zikmund (2003)'s table of sample size calculation. According to Internet World Stats (2019), there were 57 million Internet users in Thailand (as of June 30, 2019). At a 95% confidence level, and a 5% error, the sample size is projected at 322 when the population size is 500,000 to higher. The total number of participants in this study was 744.

4.2 Data collection

We collected the data by using both paper-based and online questionnaires. For the paper-based data collection, we approached participants in areas such as university campuses, offices, tutoring schools, and malls. For the online data collection, an online questionnaire was constructed via Google forms and distributed through E-mail and various social media applications including Line, Twitter, and Facebook. The data from both paper-based and online questionnaires were then combined and checked for the consistency and completeness of the responses. For the incomplete data, it was eliminated.

For human subject protection, this study was approved by the Human Research Ethics Committee (Social Science and Humanities) for conducting human research. If participants were willing to participate, then we informed them about the purposes of the study, duration of time spent on questionnaire, their voluntary participation, and contact information of researchers. We also informed participants that their participation was confidential and their responses were used only for educational purposes.

The questionnaire consisted of five main sections: social media motivation, parasocial interaction, attitudinal engagement, behavioral engagement, and demographic and social media usage information. The items in an English version were translated into a Thai version and then back translated from Thai to English by a person fluent in both Thai and English to ensure the correct meaning and understanding of each item.

4.3 Measurement

4.3.1 Social media motivation

Social media motives refer to the reasons why individuals use social media. A measurement derived from Dumrongsiri and Pornsakulvanich (2010b) and Pornsakulvanich and Dumrongsiri (2013), a social networking site motive scale, was employed to measure the extent to which a person rated his/her own reasons for using social networking sites. In this study, we adapted the scale to measure a person's own reasons for using social media. The questionnaire contained 25 items with a 5- point Likert scale. An example of the items: I use social media... "because I have free time", "to meet new people", and "to make me relaxed". The reliability of the scale from the prior study ranged from .93 to .73 (Pornsakulvanich and Dumrongsiri, 2013).

In this study, the scale reliability of each motive was: peer influence (Cronbach $\alpha = .90$), relationship maintenance (Cronbach $\alpha = .87$), relaxation (Cronbach $\alpha = .86$), pass time (Cronbach $\alpha = .86$), entertainment (Cronbach $\alpha = .82$), new friendship (Cronbach $\alpha = .91$) (see Table 2).

4.3.2 Parasocial interaction

Parasocial Interaction was operationalized as a sense of interpersonal involvement with a social media personality. The scale measuring parasocial interaction was derived from Rubin and Perse (1987), which was the shortened version of the original 20-item scale (Rubin et al., 1985). The scale was adapted to record a social media user's interaction with media personalities. It consisted of the 10 items rated on a 5-point Likert scale (e.g., "my favorite social media character makes me feel comfortable, as if I am with a friend", "I miss seeing my favorite social media character when he or she is ill or on vacation"). The scale reliability from past research was Cronbach $\alpha = .90$ (Conway and Rubin, 1991). In this study, the scale was reliable with Cronbach $\alpha = .91$.

4.3.3 Attitudinal and behavioral engagement

Attitudinal engagement reflected a feeling that the social media personality affected a person's views on issues, values, and attitudes. Behavioral engagement reflected a feeling that the social media personality influenced a person's behavior. We adapted the scales from Rubin and Step's (2000) attitudinal and behavioral effect scales to measure social media audience engagement. The questionnaire for attitudinal engagement contained 10 items with a 5-point Likert scale. Behavioral engagement was recorded by also employing 10 items with a 5-point Likert scale. Past research showed that both scales were reliable, both attitudinal effects (Cronbach $\alpha = .92$) and behavioral effects (Cronbach $\alpha = .90$) (Rubin and Step, 2000). The reliability of the scales in this study was attitudinal engagement (Cronbach $\alpha = .93$), and behavioral engagement (Cronbach $\alpha = .93$).

4.3.4 Demographic and social media usage information

The questionnaire contained demographic questions: age, gender, income, education, and occupation. Additionally, general information regarding the amount of social media usage, the favorite social media platform and related social media figures was collected.

4.4 Data analysis

A descriptive test and scale reliability were tested for all measures. For Hypothesis 1a and 1b, a hierarchical regression analysis was conducted separately to test the predictive relationships of social media motivation, parasocial interaction, and attitudinal and behavioral engagement. Research Question 1 used an independent-sample t test to measure differences between genders in regard to parasocial interaction. Research Question 2 used an Analysis of Variance to test differences among three age groups in terms of parasocial interaction.

5. RESULTS

Overall, the data in the study received acceptable reliability levels, being more than 0.80 (Cronbach α level). In addition, a descriptive test was conducted to determine demographics and social media usage data.

5.1 Demographic and general data

The total number of participants in this study was 744; 23.5% were male, and 76.5% were female. Participants were ranged in age between 18-32 (41.9%), 33-45 (42.6%), and above 45 (15.5%). A majority of the participants received a monthly income of less than 30,000 Thai Baht (71.9%), and had earned a Bachelor degree (52.7%). A majority of them worked in public companies (28.2%) and private companies (24.1%).

5.2 Social media usage

Participants identified social media they had used the most to follow their favorite figures. They reported that they used Facebook (50.8%) the most, followed by Instagram (23%), YouTube (12.6%), Twitter (10.2%), and Line (2%). Table 1 shows the amount of time participants spent in following their favorite figures; average minutes daily on social media platforms were: Facebook 158 minutes, YouTube 116 minutes, Line 95 minutes, Instagram 70 minutes, and Twitter 50 minutes.

Table 1: Summary of the Average Social Media Usage

Social Media	Amount of Use (Average Minutes/Day)
Facebook	158
YouTube	116
Line	95
Instagram	70
Twitter	50

Note: The numbers showing the amount of use indicate concurrent use of social media daily to follow favorite media figures

5.3 Social media motives structure

The factor analysis, with a principal component analysis on a varimax rotation, was computed for social media motive items. The factor was interpreted whether to be retained using (1) the .50/.30 criterion and (2) an eigenvalue above 1.0. Overall, the findings showed six factors, accounted for 69.48% of the total variance with 20 items retained (see Table 2). Five items were not loaded on any factors and so were eliminated.

Table 2: Factor Loading for Social Media Motives

Scale Items	Factor Loading					
	1	2	3	4	5	6
<i>Factor 1 Peer Influence</i>						
Because my friends want me to use it.	.86	.03	-.03	.12	.15	.08
Because my friends invited me.	.85	.05	-.00	.13	.19	.12
Because I follow my friends.	.81	-.01	-.05	.13	.19	.08
Because my friends have it.	.80	.13	.06	.15	.12	-.01
<i>Factor 2 Relationship Maintenance</i>						
To communicate with friends.	.02	.84	.26	.04	.05	-.00
To keep in touch with close friends.	.02	.84	.17	.14	.10	.04
To chat with my friends anytime.	.04	.83	.12	.11	.09	.08
To contact old friends.	.08	.69	.10	.03	.11	.25
<i>Factor 3 Relaxation</i>						
To have fun.	.00	.26	.78	.15	.19	.03
To make me relax.	-.01	.20	.71	.14	.28	-.03
To look for interesting things.	-.05	.31	.71	.10	.06	.14
<i>Factor 4 Pass time</i>						
Because I have nothing to do.	.15	.03	.07	.87	.13	.01
Because I have free time.	.14	.12	.11	.83	.10	-.04
Because I am bored.	.16	.10	.17	.77	.13	.03
<i>Factor 5 Entertainment</i>						
To write my story.	.22	.08	.09	.15	.78	.11
To comment others.	.25	.04	.06	.06	.76	.24
To see others' pictures and comments.	.11	.11	.29	.09	.71	-.03
To post my pictures.	.15	.23	.11	.18	.65	.22
<i>Factor 6 New Friendship</i>						
To meet new people.	.12	.17	.15	.06	.20	.86
To find new friends.	.13	.24	.08	.10	.20	.84
<i>Mean</i>	2.68	4.15	4.14	3.18	3.00	3.23
<i>SD</i>	0.96	0.76	0.71	1.02	0.88	1.06
Cronbach α	0.91	0.84	0.87	0.86	0.82	0.92

Notes: $N = 744$. The Kaiser–Meyer–Olkin (KMO) coefficient was .88. The Bartlett's test of sphericity coefficient was significant (.000). Means were calculated from a 5-point Likert scale.

Motives 1: *Peer Influence* (31.68% of the total variance, eigenvalue = 7.92). The first factor indicated that participants used social media to follow friends and because their friends had it (Cronbach $\alpha = .91$).

Motive 2: *Relationship maintenance* (13.37% of the total variance, eigenvalue = 3.34). The second factor indicated that the reason for using social media was to communicate with friends and to keep in touch with old friends (Cronbach $\alpha = .87$).

Motive 3: *Relaxation* (7.77% of the total variance, eigenvalue = 1.94). The third factor indicated participants using social media to relax and to have fun (Cronbach $\alpha = .84$).

Motive 4: *Pass time* (6.40% of the total variance, eigenvalue = 1.60). The fourth factor indicated that participants used social media because they had free time and they had nothing to do (Cronbach $\alpha = .86$).

Motive 5: *Entertainment* (5.42% of the total variance, eigenvalue = 1.36). The fifth factor indicated that social media were used to post pictures and to comment others (Cronbach $\alpha = .82$).

Motive 6: *New friendship* (4.83% of the total variance, eigenvalue = 1.21). The last factor indicated the reason for using social media was to find new friends and to meet new people (Cronbach $\alpha = .92$).

People were motivated to use social media because of six reasons: relationship maintenance, relaxation, new friendship, pass time, entertainment, and peer influence.

The Variance Inflation Factor (VIF) was tested to see whether there was multicollinearity in the regression model before testing Hypothesis 1a and 1b. The VIF value was acceptable when it was no more than 10 (Hair et al., 1995). In this study, the maximum VIF value of 1.58 suggested no multicollinearity among the independent variables in the model. Moreover, the correlation matrix of variables was computed (see Table 3).

Hypothesis 1a posited that social media motivation and parasocial interaction would predict attitudinal engagement. A hierarchical regression analysis was performed. The final regression equation revealed that all variables were accounted for with 37.9% of the variance in the attitudinal engagement. The major predictors were five social media motives: Peer influence ($\beta = .19, p < .001$), relationship maintenance ($\beta = -.08, p < .05$), relaxation ($\beta = .08, p < .05$), pass time ($\beta = .87, p < .05$), and entertainment ($\beta = .15, p < .05$), and parasocial interaction ($\beta = .41, p < .001$) (see Table 4). The results showed that people who used social

media for relationship maintenance, relaxation, pass time, entertainment, and peer influence, and parasocial interaction were more likely to have attitudinal engagement with their favorite media personalities.

Hypothesis 1b posed that social media motivation and parasocial interaction would predict behavioral engagement. After entering all variables, the final regression accounted for 34.2% of the variance in the behavioral engagement. The main contributors were three social media motives: Peer influence ($\beta = .19, p < .001$), relaxation ($\beta = .10, p < .01$), entertainment ($\beta = .14, p < .001$), and parasocial interaction ($\beta = .39, p < .001$) (see Table 4). The results showed that people who used social media for relaxation, entertainment, and peer influence, and to engage in parasocial interaction, were more likely to have behavioral engagement with their favorite media personalities.

Table 3: Correlation Matrix of Variables

	1	2	3	4	5	6	7	8	9
1. Peer Influence	-								
2. Relationship Maintenance	.14***	-							
3. Relaxation	.14**	.49***	-						
4. Passing Time	.34***	.23***	.31***	-					
5. Entertainment	.41***	.32***	.38***	.35***	-				
6. New Friendship	.27***	.38***	.30***	.19***	.42***	-			
7. Parasocial Relationship	.20***	.21***	.34***	.22***	.27***	.21***	-		
8. Attitudinal Engagement	.36***	.16***	.29***	.29***	.38***	.23***	.52***	-	
9. Behavioral Engagement	.34***	.15***	.29***	.27***	.37***	.22***	.50***	.83***	-
Mean	2.68	4.15	4.14	3.18	3.00	3.23	3.65	3.14	3.14
SD	0.97	0.76	0.71	1.020	.88	1.06	0.71	0.74	0.76

Note: N = 744. ***p < .001, **p < .01.

Table 4: Summary of Separate Hierarchical Regression Analysis for Social Media Motives and Parasocial Interaction Predicting Attitudinal and Behavioral Engagement

Predictors	Attitudinal Engagement		Behavioral Engagement	
	β	$R^2 = .24***$	β	$R^2 = .22***$
Step 1				
Peer influence	.23**		.23***	
Relationship Maintenance	-.07**		-.05	
Relaxation	.19***		.20***	
Pass Time	.10**		.08	
Entertainment	.18***		.18***	
New Friendship	.05		.03	
Step 2		$\Delta R^2 = .37**$		$\Delta R^2 = .34***$
Peer influence	.19***		.19***	
Relationship Maintenance	-.08*		-.06	
Relaxation	.08*		.10**	
Pass Time	.08*		.05	
Entertainment	.15***		.14***	
New Friendship	.15		.01	
Parasocial Interaction	.41***		.39***	

Note: *p < 0.05. **p < 0.01. ***p < 0.001. β is Standardized Coefficients. The Table shows standardized coefficients of the final regression. For attitudinal engagement, Final $R = .61, R^2 = .37, \Delta R^2 = .37, F(7, 736) = 64.27, p < .001$. For behavioral engagement, Final $R = .59, R^2 = .34, \Delta R^2 = .34, F(7, 736) = 56.17, p < .001$.

For Research Question 1, an independent-sample t test was performed to test whether there were differences between genders in terms of parasocial interaction. The results showed no significant differences between males and females in parasocial interaction, $t(742) = -4.12, p > .05$. Thus, males and females did not differ in parasocial interaction.

For Research Question 2, an Analysis of Variance showed there were differences in age groups in terms of parasocial interaction, $F(2, 741) = 6.29, p < .01$. Moreover, a post hoc test indicated the mean score differences were significant in age groups, 18-32, 33-45, and more than 45. The mean score for (Group 1) 18-32 ($M = 3.75, SD = 0.72$) was significantly different from group (Group 2) 33-45 ($M = 3.60, SD = 0.70$), and

(Group 3), more than 45 ($M = 3.50$, $SD = 0.65$). The results indicated that those who were younger (18-32) tended to engage in parasocial interaction more than those who were in the older groups (33-45 and more than 45). There were no significant differences between Group 2 and Group 3 (see Table 5).

Table 5: Summary of Analysis of Variance for Age and Parasocial Interaction

Age Groups	Mean	SD
(Group 1) 18-32	3.75*	0.72
(Group 2) 33-45	3.60*	0.70
(Group 3) 46+	3.50**	0.65

Note: ** $p < .01$, * $p < .05$.

6. DISCUSSION AND CONCLUSION

This study had two main purposes. First, it sought to examine the relationships between social media motivation, parasocial interaction, attitudinal and behavioral engagement. Second, it investigated the differences in gender and age groups in regard to parasocial interaction. In general, the findings indicated that those who used social media for relationship maintenance, relaxation, to pass time, entertainment, peer influence, and parasocial interaction were more likely to have attitudinal engagement with their favorite media personalities. Those who used social media for relaxation, entertainment, peer influence, and parasocial interaction were more likely to have behavioral engagement with their favorite media personalities. In addition, the findings showed that there were significant differences in age groups in terms of parasocial interaction as a response to platform content. Younger people were more likely to engage in parasocial interaction than those who were older. However, there were no significant gender differences related to parasocial interaction.

We expected that social media motivation and parasocial interaction would affect attitudinal and behavioral engagement. Attitudinal engagement reflected a feeling that social media personalities influenced a person's views on issues, values, and attitudes. Behavioral engagement reflected a feeling that social media personalities influenced a person's behavior. The results confirmed that attitudinal engagement and behavioral engagement were affected by social media motivation and PSI. These findings were consistent with past research on talk radio listening (Rubin and Step, 2000). They found that PSI and media motivation such as activity to pass time predicted attitudinal and behavioral responses on societal concerns. Regarding PSI and its consequences, this study was consistent with the studies of Lee and Watkins (2016) and Yuksel and Labrecque (2016) suggesting PSI influenced consumers' attitudes and behaviors. Through social media platforms, PSI could change emotion and mood as well as online and offline actions.

The demonstrated predictive relationships among social media motivation, PSI, and engagement corroborate the uses and gratifications premise and extend the knowledge in social media uses and effects and interpersonal communication. The evidence from past research on media uses and effects confirmed the associations between media motives and PSI (Conway and Rubin, 1991; Kim and Rubin, 1997) and attitudinal and behavioral effects (Rubin and Step, 2000) of traditional media settings, whereas the present study confirmed these associations in the social media settings.

Moreover, the results indicated that some social media motives including relaxation, entertainment, and peer influence were more likely than other motives to predict parasocial interaction and engagement. In this study, we found that media users tended to use social media to satisfy social and ritualistic needs such as relaxation, entertainment, and peer influence, and these needs were related to parasocial interaction.

For parasocial interaction, this study suggests that media users would select social media to interact and communicate with their favorite media personalities. They would use social media for certain reasons to gratify their felt needs. It is reasonable to assume that they find social media a functional alternative to interpersonal interaction. The present study supported the uses and gratifications premise that media can provide functional alternatives to other channels of communication (Katz et al., 1973; Rubin, 2009). As Rosengren and Windahl (1972) suggested, parasocial interaction may be a source of alternative companionship as a result of some deficiencies in real life and media dependency. It seems that media users were able to get closer to their favorite media personalities more easily and conveniently via social media platforms. They could follow, subscribe, and be friends with their favorite media figures to fulfill their felt needs such as to pass time and be entertained. The interaction between media users and media figures could occur anytime and anywhere through online platforms.

This study implies that social media could facilitate the interaction process between social media users and media personalities. This raises an important question whether or not parasocial interaction could make

media users more dependent on social media and even be addicted to social media. But for certain, the present study demonstrated that parasocial interaction would lead media users to engage more with their favorite media figures' activities, lifestyles, and opinions; as a result, these affected their attitudes on certain issues, and subsequent behaviors.

Another finding from the study illustrated that age could explain social media use for parasocial interaction. Younger groups tended to engage in parasocial interaction more than those who were older. This is not surprising, given the use of social media among young generations to follow their favorite media figures such as boy bands, girl groups, singers, actors, and actresses is phenomenal in Thailand. The number of social media users has been increasing among younger generations, especially the use of Twitter and Instagram to follow and keep updated with their favorite media figures (We Are Social and Hootsuite, 2018).

This study confirmed a notion of PSI and demonstrated that young generations preferred using social media for PSI with their favorite media figures. It seems that they feel familiar with these media figures, regarding their relationship with them as similar to that with social friends, and they would like to meet these media figures in person if they had a chance. It is reasonable to assume that, with the characteristics of social media, the interaction between media users and media figures could transform parasocial interaction into parasocial relationships and even interpersonal relationships. Moreover, it is possible to make advances in the understanding of a notion of PSI whether or not a one-sided interpersonal interaction of media users and media personalities could turn into an interactive interaction via social media platforms.

All in all, the novelty of the results of the present study suggests that the uses and gratifications perspective appeared to be applicable to explain the role of an active audience in using social media and its consequences. The results highlighted that participant social media users were active in selecting social media to fulfill their felt needs such as maintaining relationships, finding new friends, for relaxation, to pass time, entertainment, and peer influence. Moreover, social media users have used social media to interact with media personalities (e.g., actors/actresses, YouTubers, and politicians). Social media users felt that a media personality is a natural, down-to-earth person and would like to meet him/her in person. From the results, we also learned that parasocial interaction was a crucial variable to explain social media consequences, in this study, social media users' attitudes and behaviors.

Prior studies revealed that PSI was associated with media motivation and media outcomes including cognitive, affective, and behavioral (e.g., Baek et al., 2014; Djafarova and Rushworth, 2017; Lee and Watkins, 2016; Rubin and Step, 2000; Yuksel and Labrecque, 2016). Nevertheless, we have known little about PSI and social media engagement regarding attitudinal and behavioral engagement and the interrelationships among a host of variables in social media contexts. The present study helps us understand the role of active audience and interpersonal interaction in new media contexts and the overall pattern of a social media user's motivation, parasocial interaction, and attitudinal and behavioral engagement.

In addition, the novelty of the results would be beneficial for business people in communication and marketing areas to understand PSI between social media users and media figures and celebrities. From the findings, these media figures influenced the way social media users think, feel, and act. Thus, communication and marketing practitioners may take into consideration the influence of media figures on consumer engagement and the importance of online interaction between media figures, celebrities, and YouTubers and consumers.

7. LIMITATIONS AND FUTURE DIRECTIONS

This study contained some limitations to be pinpointed. First, the PSI scale used in this study came from a well-established procedure that has been used mostly to measure PSI in traditional media contexts such as talk radio, television soap opera, and television news viewing. We adapted the PSI scale to measure parasocial interaction via social media contexts. Even though the reliability of the PSI scale in this study showed a good internal consistency ($Cronbach \alpha = .91$), the PSI scale may not reflect different types of interactions between media users and media figures in the online contexts. Future research should take into consideration parasocial interaction between media users and media figures, which may involve various types of social media interactions such as interactions through viewing, texting, following, and sharing. This may help us to understand more about types of interaction via social media platforms and parasocial interaction.

Second, a majority of the participants in this study consisted of females (76.5%), with fewer male respondents (23.5%). The percentage of genders was somewhat disproportionate. One of the main reasons was that many potential male participants did not pass a screening question asking whether or not they had used social media to follow their favorite media figures (e.g., actors, actresses, singers, athletes, politicians, or YouTubers) in the past months. In fact, the evidence also showed that males (65%) generally were less likely

to use social media than were females (78%) (Pew Research Center, 2021). This study suggested that males also were less likely to use social media to follow their favorite media personalities. Future research should be well-designed and particularly take into consideration social media usage, activities, and behaviors that may be different between genders.

Third, this study did not examine parasocial interaction on a specific type of social media use (e.g., YouTube and Twitter) and a type of media figures (e.g., YouTubers, actors/actresses, and athletes). It examined the interaction between media users and media figures via social media in general. The results would be preliminary evidence to understand various types of social media to follow favorite media figures. However, Giles (2002) suggested that parasocial interaction might be different with different types of media figures. It is plausible that media motives and media effects of parasocial interaction might be different on YouTube than Twitter. Future study should focus on a certain type of social medium and/or a type of media figure to comprehend social media motives, uses, and effects on each social media platform.

Fourth, the present study identified the associations among parasocial interaction, media motivation, attitudinal engagement, and behavioral engagement in social media platforms. The findings extend our knowledge of the study of parasocial interaction and its consequences. However, more variables may be related to parasocial interaction. As Rubin (2016) pointed out, parasocial interaction has been found to be positively associated with a host of variables, including media affinity, attraction, perceived realism, and interpersonal involvement. It should be meaningful to test these variables in online platforms to understand the predictive interrelationships among a host of variables.

Finally, the study found differences between age groups in terms of parasocial interaction, which would enhance the body of knowledge of the influence of demographic factors on parasocial interaction. However, as Rosengren and Windahl (1972) pointed out, parasocial interaction may be a source of alternative companionship as a result of some deficiencies in real life. Hence, another avenue for future study would be to explore groups of people who have restricted opportunities for interpersonal interaction and communication, such as older adults and people with disabilities. Parasocial interaction via online settings might help these groups of people gratifying their deficiency regarding interpersonal communication, interaction, and relationships.

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