A Mediation Analysis of Psychological Variables on the Relationship between Materialism and Social Media Addiction

Dr.Sarinya L. Suttharattanagul

Lecturer of International Business Management Department,
School of Business Administration, Bangkok University

Dr.Pakakorn Thammachokchai

Director of the Thai MBA Program,
Stamford International University

Dr.Thittapong Daengrasmisopon

Lecturer of Graduate School,
Stamford International University
(Corresponding Author)

ABSTRACT

The use of social media increased rapidly during the COVID-19 pandemic. However, this growth included a lot of unnecessary use, which can impact concentration levels and learning abilities among younger generations. These negative effects have extended in line with this growing addiction to social media. In previous researches, the relationship between traits, psychological factors and addiction behaviors were examined; however, contradictory results were found. This study aims to investigate the relationship in more detail by employing stress and depression as mediators in the relationship between materialism and social media addiction. This study's sample comprises 403 working adults aged between 21 and 56 years old. As hypothesized, stress was found to be a factor impacting the use of social media as a coping mechanism. This study confirmed the role of stress as a mediator of the relationship between materialism and social media addiction. The findings contribute to literature and knowledge of stress in various aspects. Moreover, knowing the consequences of materialism and stress can aid practitioners in understanding the psychological concerns of social media addiction.

Keywords: Social Media Addiction, Materialism, Stress, Consumer Behavior, Thailand

การวิเคราะห์อิทธิพลการคั่นกลางของปัจจัย
ทางจิตวิทยาต่อความสัมพันธ์ระหว่าง
วัตถุนิยมกับการเสพติดสื่อสังคมออนไลน์

ดร.ศริญญา สุทธรัตนกุล

อาจารย์ประจำหลักสูตรวิชาการจัดการธุรกิจระหว่างประเทศ

คณะบริหารธุรกิจ มหาวิทยาลัยกรุงเทพ

ดร.ภัคกร ธรรมะโชคชัย

ผู้อำนวยการหลักสูตรภาคภาษาไทย หลักสูตรบริหารธุรกิจมหาบัณฑิต

มหาวิทยาลัยนานาชาติสแตมฟอร์ด

ดร.ทิตพงศ์ แดงรัศมีโสภณ

อาจารย์ประจำหลักสูตรบริหารธุรกิจมหาบัณฑิต

มหาวิทยาลัยนานาชาติสแตมฟอร์ด

(ผู้ประสานงานหลัก)

บทคัดย่อ

ในช่วงสถานการณ์โควิดที่ผ่านมามีการใช้งานสื่อสังคมออนไลน์เพิ่มขึ้นอย่างรวดเร็ว แต่อย่างไรก็ตามการเพิ่มขึ้นเหล่านี้ได้หมายรวมไปถึงการใช้งานที่ไม่จำเป็นหลายรูปแบบ ซึ่งส่งผลกระทบต่อระดับสมาธิและความสามารถในการเรียนรู้ของคนอายุน้อย ๆ ผลกระทบทางลบเหล่านี้มีความเชื่อมโยงกับการเสพติดสื่อสังคมออนไลน์ที่เพิ่มมากขึ้นด้วย จากงานวิจัยที่ผ่านมา ความสัมพันธ์ระหว่างลักษณะบุคคล ปัจจัยทางจิตวิทยาและพฤติกรรมการเสพติด ได้ถูกนำมาตรวจสอบ อย่างไรก็ตาม ผลการวิจัยที่ออกมายังมีความขัดแย้ง การศึกษาชิ้นนี้มีวัตถุประสงค์ที่จะตรวจสอบความสัมพันธ์ให้ละเอียดมากขึ้น โดยการนำความเครียดและอาการซึมเศร้ามาใช้เป็นตัวแปรคั่นกลางระหว่างวัตถุนิยมและการเสพติดสื่อสังคมออนไลน์ โดยการศึกษานี้มีกลุ่มตัวอย่างเป็นคนทำงานอายุ 21–56 ปี 403 คน ซึ่งเป็นไปตามสมมติฐานที่ตั้งไว้ ความเครียดมีอิทธิพลต่อการใช้งานสื่อสังคมออนไลน์ในฐานะที่เป็นกลไกในการรับมือ โดยการศึกษานี้สามารถยืนยันบทบาทของความเครียดฐานะที่เป็นตัวแปรคั่นกลางระหว่างวัตถุนิยมกับการเสพติดสื่อสังคมออนไลน์ ผลการวิจัยสามารถนำไปเป็นความรู้แง่มุมใหม่ ๆ ที่เกี่ยวข้องกับความเครียด นอกจากนี้ การได้เรียนรู้ผลกระทบของวัตถุนิยมและความเครียดสามารถช่วยภาคธุรกิจในการทำความความเข้าใจเกี่ยวกับกระบวนการทางจิตวิทยาที่เกี่ยวเนื่องกับการเสพติดสื่อสังคมออนไลน์

คำสำคัญ : การเสพติดสื่อสังคมออนไลน์ วัตถุนิยม ความเครียด พฤติกรรมผู้บริโภค ประเทศไทย

1. INTRODUCTION

At the beginning of 2022, the number of global social media users reached 4.62 billion, or approximately 58.4 percent of the world's population, according to the Digital 2022 Global Overview Report (Kemp, 2022). Although the number of social media users may not be a true representation of unique individual users, the number still grew by more than 10 percent over the past twelve months (Kemp, 2022). A transition towards online shopping around the world was also observed across most sectors during the COVID-19 pandemic (J.P. Morgan, 2020) and this change to online shopping behaviors could have lasting effects on emerging economies, according to UNCTAD (United Nations Conference on Trade and Development, 2020). Amidst this environment of rising social media usage and Internet shopping, the addictive use of social media can cause harmful consequences (Sun & Zhang, 2021). As this phenomenon received growing attention, the majority of the media in the UK and US chose to frame social media addiction as an individual disorder in 2015–2016, then as a manufactured epidemic in 2017–2018, and later as a legislative issue in 2018–2019 (Lundahl, 2021).

The global phenomenon of the COVID-19 pandemic was believed to have triggered an increase in the prevalence of anxiety and depression (World Health Organization, 2022). According to the World Health Organization (WHO), global rates of anxiety and depression increased by a massive 25 percent in a year where younger people, especially those aged between 20 and 24, were more affected than older adults (United Nations, 2022; World Health Organization, 2022). The coronavirus pandemic therefore had a high impact on mental health (Bueno-Notivol et al., 2021). Stress, anxiety, fear, sadness and loneliness were all symptoms experienced more often than usual during the pandemic; while the impact of mental health disorders and depression were also increased (Mayo Clinic, 2021). A four-country cohort study to examine the impact of the COVID-19 pandemic on the mental health of young people in Ethiopia, India, Peru and Vietnam found that pandemic-related stressors were risk factors for anxiety and depression among young people in these low/middle-income countries (Porter et al., 2021). Similarly, an empirical study of higher education students in four countries in the Asia Pacific region, comprising Malaysia, Indonesia, Thailand, and China, also found that students were at risk of mental health challenges during the coronavirus pandemic, whilst anxiety was reported to be the most significant problem among them, followed by depression and stress (Jiang, Yan-Li, Pamanee, & Sriyanto, 2021).

In terms of understanding social media addiction, the literature on the causes is still varied. A number of empirical studies utilizing internet-specific models—i.e. the cognitive-behavioral model of pathological Internet use (Davis, 2001) and the social skill model of problematic Internet use (Caplan, 2003)—examined factors such as social anxiety (e.g., de Bérail, Guillon, & Bungener, 2019; Lee-Won, Herzog, & Park, 2015), and loneliness (e.g., Shettar, Karkal, Kakunje, Mendonsa, & Chandran, 2017; Yu, Wu, & Pesigan, 2016). Along with this directional increase in social media usage, recent studies conducted in various major emerging countries, such as China (Luo, Chen, & Liao, 2021), India (David & Warrier,

2021), and Turkey (Parlak Sert & Başkale, 2022), reported increased social media addiction during COVID-19.

The so-called 'dark side' of social media, i.e. negative behaviors associated with the use of social media, has also been studied recently by various scholars. In their study of Thai social media users, Pellegrino, Abe, & Shannon (2022) found that social media intensity significantly mediates the relationship between materialism and three negative consumption behaviors, namely compulsive buying behavior, conspicuous buying behavior, and impulsive buying behavior. This finding is also in line with the previous empirical study of Mueller et al. (2011), who found that materialism and depression were associated with compulsive buying behavior. More empirical evidence of the dark side of social media can be found in social media usage related to stalking, online self-disclosure and problematic sleep, especially among users who are young adults (Dhir, Talwar, Kaur, Budhiraja, & Islam, 2021). From these recent findings, a potential association can be made between materialism and some addictive behaviors, such as compulsive buying or excessive use of social media, with depression and stress playing important mediating roles. The main purpose of this study, therefore, is to investigate the mediating roles of stress and depression in the relationship between materialism and social media addiction.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Social Media Addiction

According to the Marriam-Webster (n.d.-a), the term addiction is defined as "a strong inclination to do, use, or indulge in something repeatedly." The World Health Organization reported documented cases of excessive use of the Internet and other communication devices which often had negative health consequences (World Health Organization, 2018). According to Kuss & Griffiths (2017), social networking has become a way of being and people can become addicted to using social networking sites. Social media addiction, problematic social media use, or compulsive social media use are most commonly defined as a maladaptive psychological dependency on social networking services (SNS), which includes variations such as Facebook addiction, SNS addiction, and addictive SNS use, to the extent that behavioral addiction symptoms occur (Cao, Gong, Yu, & Dai, 2020; Chen, 2019; Sun & Zhang, 2021; Turel & Serenko, 2012).

The consequences of social media addiction have varied depending on the intensity of its symptoms, from sleeping disorders to anxiety and a lack of self-esteem (Vogel et al, 2014, Woods & Scott, 2016). Higher level of social media usage was found to be associated with higher levels of perceived social isolation, loneliness, and depression (Appel, Grewal, Hadi, & Stephen, 2020). From an empirical study in India, social media usage intensity was found to have a positive influence on three

behavioral traits, namely materialism, impulse buying and conspicuous consumption (Gupta & Vohra, 2019). In addition, social media intensity was also found to have a strong influence on consumer spending within the American cohort of a cross-national study of American and South Korean consumers (Thoumrungroje, 2018).

2.2 The Relationship between Materialism and Social Media Addiction

Materialism is defined in the Marriam-Webster Dictionary as "a preoccupation with or stress upon material rather than intellectual or spiritual things" (Merriam-Webster, n.d.-b). The term was discussed by different themes, including acquisition centrality, acquisition as the pursuit of happiness, and possession-defined success (Richin & Dawson, 1992). Materialism can be a strong predictor of Internet addiction (e.g., Pellegrino, Abe & Shannon, 2022; Kamal, Chu & Pedram, 2013; Chu, Windels & Kamal, 2015; Ismail, Nguyen & Mekewar, 2018) and this relationship is stronger amongst male than female populations (Manchiraju, 2018). In a recent study among Chinese adolescents, materialism was found significantly associated with social network sites addiction (Geng, Wang, Bao, Wang, Wei, Li, & Lei, 2023). A study conducted in China and the United States also found that materialism is positively related to social media intensity (Chu, Windels, & Kamal, 2016). Recently, a study in Thailand revealed the negative side of social media whereby social media intensity significantly mediates the relationship between materialism and three negative consumption behaviors, i.e. compulsive buying, conspicuous buying, and impulsive buying behaviors, among Thai social media users (Pellegrino, Abe, & Shannon, 2022). This underlies the importance of further examining social media addiction (SMA) and its relationships with materialism amongst social media users in emerging Asian countries, such as Thailand. Hence, this study proposed that:

H1: Materialism is positively related to social media addiction.

2.3 The Mediating Roles of Stress and Depression

According to World Health Organization (2023), stress can be defined as "a state of worry or mental tension caused by a difficult situation." In psychology, depression is "a mood or emotional state that is marked by feelings of low self-worth or guilt and a reduced ability to enjoy life" (Encyclopædia Britannica, 2023). Several previous studies (e.g., Liu, Zhao, and Liu, 2018; Brousskeli and Loumakou, 2014; Somer and Ruvio, 2014) have confirmed the relationship between materialism and stress. In particular, the studies by Ruvio, Somer, and Rindfleisch (2014) and Roberts, Tanner, and Manolis (2005) found that those who are highly materialistic would experience higher levels of stress when they feel unsafe or threatened. On the other hand, stress has also been found to have effects on social media usage and addiction. In 2021, Zhao and Zhou stated that during the COVID pandemic, highly stressed individuals tended to have a higher likelihood of becoming addicted to social media.

In addition, Cannito et. al. (2022) also stated that stress levels can be used to predict the tendency of social media addiction. Since stress is affected by materialism, and it also affects social media addiction, this paper hypothesized that:

H2: Stress mediates the relationship between materialism and social media addiction.

Regarding another factor that may mediate the relationship between materialism and social media addiction, Wang, Lei, Yu, & Li (2020) discovered the mediating effect of depression between social networking site addiction and materialism in Chinese adolescents. This mediating effect is supported by a number of previous studies (e.g., Kashdan and Breen, 2007; Mueller et al., 2011; Azibo, 2013), which indicate that depression is positively associated with materialism. Those who are materialistic tend to compare themselves with others and this leads to negative attitudes and feelings toward themselves. Aside from the relationship between materialism and depression, in 2018, a study by Wang et al., stated that social network addiction is also positively linked with adolescent depression. Depressed teens were found to have a higher tendency toward becoming addicted to social media. This aligns with many previous studies, such as Haand & Shuwang (2020), Aydin et al. (2021), Jasso-Medrano & López-Rosales (2018), and Brailovskaia & Margraf, 2020), which have shown the significant relationship between depression and social media addiction. Thus, since Wang et. al. (2020) have found that depression plays a mediating role between materialism and social media addiction, it is possible that depression has the same effect on Thai consumers as well. This study therefore proposed that:

H3: Depression mediates the relationship between materialism and social media addiction.

In this study, the proposed conceptual model has been developed from previous literature and formed hypotheses. The aim of this study is to test whether stress mediates the relationship between materialism and social media addiction and whether depression mediates the relationship between materialism and social media addiction. These hypotheses form the mediation model (Figure 1).
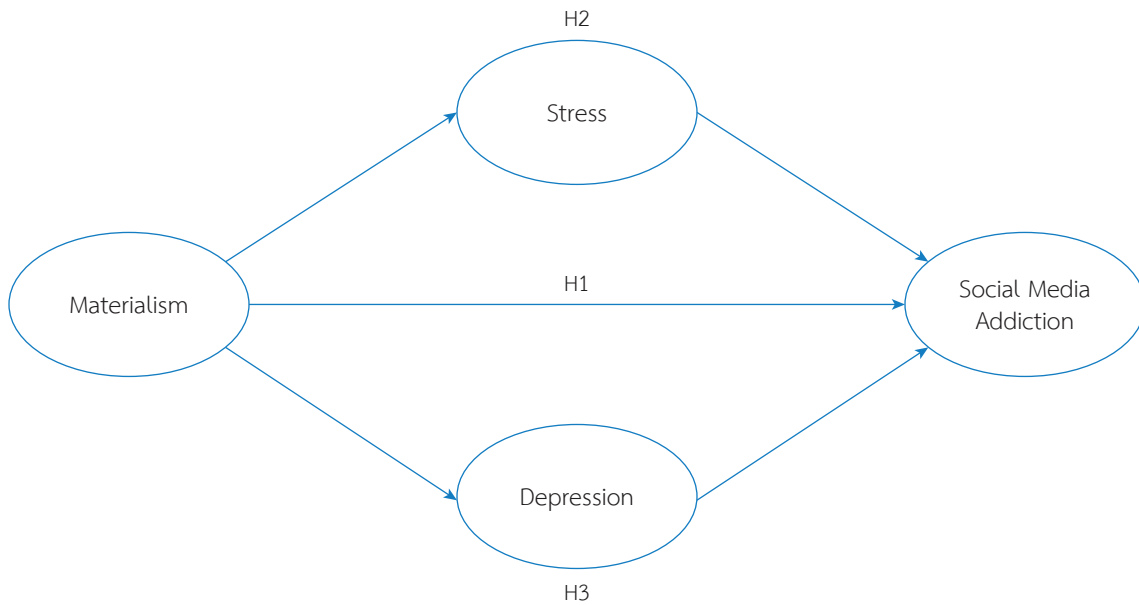
Figure 1: Proposed Hypothesis Model

According to the aforementioned literature review, this model illustrates the possible relationships between materialism and social media addiction, as well as the mediating roles of stress and depression on the relationship. The overall construct can also be explained and supported by the uses and gratifications theory, which focuses on how consumers use the media to manage their emotions (Zillmann, 1982; Zillmann and Bryant, 1985 & 1986). There are experiments suggest that hedonic media content and pleasant stimuli, such as pleasant music (Day, 1980), erotica music (Zillmann and Sapolsky, 1977), and cartoons (Baron and Ball, 1974), can improve the negative mood of the audience. Since social media can be considered as hedonic media and/or pleasant stimuli, the usage of social media, therefore, can be affected by psychological factors that regulate negative emotional states such as materialism, stress, and depression. In other words, these negative psychological factors may trigger more use of social media, which leads to higher level of social media addiction.

3. METHODOLOGY

The quantitative method is employed in this study to test the hypotheses. The data were collected from working adults in Bangkok, Thailand, which is considered one of the countries with the highest numbers of social media usage (Statista, 2023). Bangkok was selected as the location for data collection since people living in the capital city tend to have higher stress and a potentially higher depression score. The total of 1,000 questionnaires were distributed at the office building in the center of Bangkok city and there were 403 working adults aged 21 to 56 years old completed this survey after the data cleaning process. Of these, 289 were female (71.7%) and 114 were male (28.3%), while the average age of the participants was 36.46 years old (SD = 7.6). In terms of education, 208 participants

(51.6%) had received a bachelor's degree, while 188 (46.6%) had attained a Master's or Doctoral degree. The socioeconomic status calculated from income level, 48.9% were classified as having a low socioeconomic status (SES) (N = 197), while 51.1% had a high SES (N = 206). (see Table 1)

The questionnaire used in this study was designed based on standardized scales and questions. It was comprised of 5 parts: screening questions, social media behavior, online shopping, psychological factors, and personal information. In this study, the scales were adjusted to four-point Likert scale to reduce central tendency bias except the materialism scale which was tested acceptable in the past studies in Thailand. To ensure measurement validity, the process of back translation and the pilot test of 40 respondents were employed. The measurements used for each variable are described below:

The materialism measure was adjusted from Wong et al. (2003), who surveyed consumers from several Asian countries. Participants are requested to rate their responses on a five-point Likert scale that ranges from "strongly disagree = 1 to strongly agree = 5". The samples of questions are "The things I own say a lot about how well I'm doing in life.", "I admire people who own expensive homes, cars, and clothes." The alpha reliability coefficient of this scale was 0.82 (M = 2.47, SD = 0.87).

The seven-item construct of stress, which has previously been used in consumer and psychological studies (e.g., Mathur et al., 2008; Burroughs and Rindfleisch, 2002), was also adopted. The questions were designed to ascertain how stressful the respondents' lives had been in the past month with responses measured on a four-point Likert scale, ranging from "not at all = 0 to a lot = 3." The samples of questions are "I tend to over react to situations." "I find it difficult to relax." The alpha reliability coefficient of this scale was 0.73 (M = 1.23, SD = 0.61).

The measure for depression was adopted from the Depression Anxiety Stress scale (Lovibond, S.H. & Lovibond, P.F., 1995). This scale has been commonly used by hospitals and psychologists as a self-report evaluation tool for depression disorders. In this study, only the depression dimension was employed to evaluate this negative emotional state by using a four-point Likert scale, ranging from "Never = 0 to Most of the time = 3.". The alpha value for the reliability test of 0.84 (M = 0.77, SD = 0.64) shows that the results are acceptable.

The most widely used scales are the Bergen Facebook Addiction Scale (Andreassen, Torsheim, Brunborg, & Pallesen, 2012) or the Bergen Social Media Addiction Scale (Andreassen, et al., 2016), the Social Media Disorder Scale (van den Eijnden, Lemmens, & Valkenburg, 2016) and the Social Media Addiction Scale (Şahin, 2018). Adapting these widely-used scales to measure social media addiction among Thai adults, a recent study of Rakrachakarn et al. (2021) also found that stress poses an impact on social media addiction, which is one of the coping responses.

Social media addiction was measured with a 4-point Likert scale within the range of "Not at all = 1 to Most of the time = 4". Higher scores indicate a higher tendency toward social media addiction. Scholars have utilized key measures to examine social media addiction. The questions were adapted from the Social Media Addiction Scale (Şahin & Yagci, 2017; Sahin, 2018), the Bergen Social Media Addiction Scale (Addreassen et al., 2012; 2016), and the Social Media Disorder (SMD) Scale (Eijnden et al., 2016). The reliability test result of the alpha value was 0.71 (M = 2.22, SD = 0.49).

4. RESULTS

Descriptive statistics and Pearson correlations were examined as a preliminary check of the data (table 1 and 2). Skewness and kurtosis values were checked for normality and the results were acceptable (> ±2) (George & Mallery, 2003). All reliability coefficients were above 0.70, which is acceptable (Nunnally, 1978). The results showed that the variance inflated factor (VIF) ranged from 1.07 to 1.82, and tolerance ranged from 0.55 to 0.94. Therefore, based on Field (2013) suggested that no multicollinearity problem was detected.

Table 1: Descriptive Statistics

Variable		n	Percent (%) or Mean (SD)
Gender	Male	114	28.30
	Female	289	71.70
Status	Single	275	68.24
	Married	113	28.04
	Separated/Divorce	12	2.98
Education	Lower than Bachelor's degree	6	1.40
	Bachelor's degree	208	51.60
	Higher than Bachelor's degree	188	46.60
SES	Low	197	48.88
	High	206	51.12
Age		343	36.46 (7.6)
Materialism			2.47 (0.87)
Social Media Addiction			2.22 (0.49)
Stress			1.23 (0.61)
Depression			0.77 (0.64)

Table 2: Correlations

	Cronbach's alpha	1	2	3	4
1. Materialism	0.82	1	.231**	.243**	.284**
2. Stress	0.73	.231**	1	.664**	.349**
3. Depress	0.84	.243**	.664**	1	.232**
4. Social media Addiction	0.71	.284**	.349**	.232**	1

** Correlation is significant at the 0.01 level (2-tailed).

For the mediation analysis, this study used the PROCESS macro (model 4) developed by Hayes (2018) to test the hypotheses. The assumption check for multiple regression on linearity, normality, homoscedasticity, and no multicollinearity are employed before performing the analysis and the results are found acceptable. The results showed a significant direct relationship between materialism and social media addiction in path c without the mediators of stress and depression (b = 0.12, t = 4.40, p < 0.00) (see Table 3). Therefore, hypothesis 1 is supported.

The potential mediating roles of stress and depression in the relationship between materialism and social media addiction were hypothesized in H2 and H3. The results revealed the significant indirect effects of materialism and stress (b = 0.16, t = 4.70, p < 0.01). At the same time, the indirect effect of stress was positively related to social media addiction (b = 0.27, t = 5.31, p < 0.01). Moreover, the indirect effect of stress on materialism and social media addiction was found to be significant (b = 0.08, t = 3.66, p < 0.01). Therefore, the mediating role of stress between materialism and social media addiction in Hypothesis 2 is confirmed. The results for the indirect effect between materialism and depression were found to be significant (b = 0.17, t = 4.73, p < 0.01). However, the indirect effect between depression and social media addiction was found to be insignificant (b = –0.03, t = –0.60). Therefore, the relationship between materialism and social media addiction with depression as a mediator was found to be insignificant (b = –0.01, t = –0.58); hence hypothesis 3 was not supported or no mediation occurred. Details of mediation results are shown in Table 3.

Table 3: Mediation Analysis

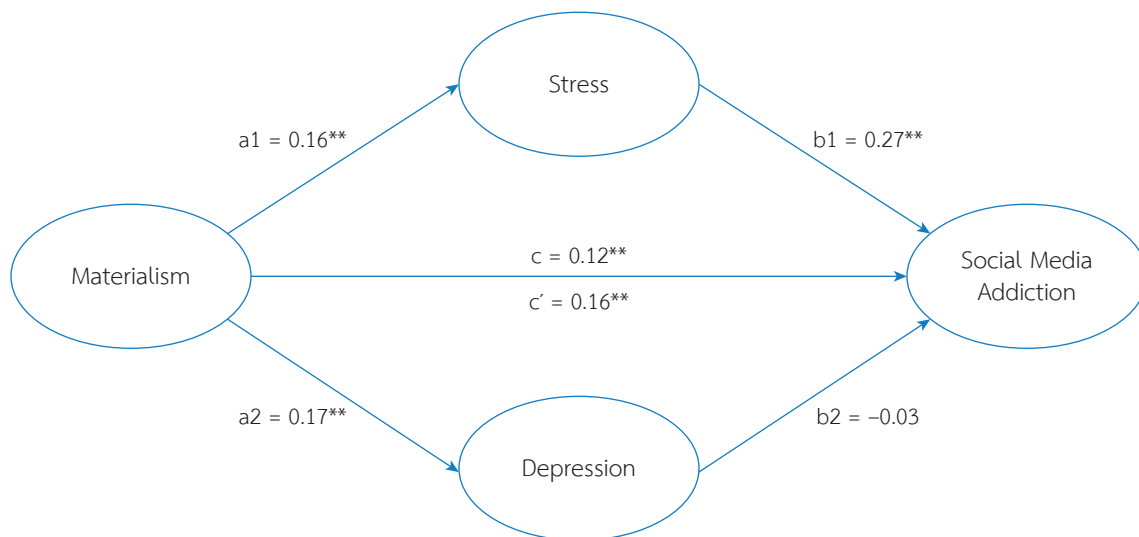| Total Effect (Materialism ➞ Social Media Addiction)	Direct Effect (Materialism ➞ Social Media Addiction)	Relationship	Indirect Effect	Confidence Interval		t-statistics	Conclusion
				Lower Bound	Upper Bound		
0.16 (0.00)	0.12 (0.00)	H2: Materialism ➞ Stress ➞ Social Media Addiction	0.08	0.04	0.12	3.66	Partial Mediation
		H3: Materialism ➞ Depression ➞ Social Media Addiction	−0.01	−0.04	0.02	−0.58	No Mediation

Figure 2: The Mediation Model

Note: **p < 0.01

5. DISCUSSION

The results reported in the previous section support H1, which indicates that materialism directly affects social media addiction (SMA). This positive relationship between the two variables is supported by previous studies from other countries (e.g. Haand & Shuwang, 2020; Aydin et.al., 2021; Jasso-Medrano & López-Rosales, 2018; Brailovskaia & Margraf, 2020). This also implies that the behavior of Thai consumers is aligned with consumers from other parts of the world, whereby individuals who are materialistic tend to be more addicted to social media.

In the process of examining the mediating variables between materialism and social media addiction (H2, H3), the direct impacts of materialism on stress and depression are also found to be positively significant, meaning that higher levels of materialism can lead to higher levels of stress and depression. As mentioned in the previous sections, the impact of materialism on stress is supported by the studies of Liu, Zhao, and Liu, (2018); Brousskeli and Loumakou (2014); Somer and Ruvio (2014); Ruvio, Somer, and Rindfleisch (2014); and Roberts, Tanner, and Manolis (2005), whereas the effect of materialism on depression is supported by the works of Kashdan and Breen (2007), Mueller et al. (2011), and Azibo (2013). However, upon further investigation, it was revealed that only stress is found to be a mediator between materialism and social media addiction, whereas depression yields no mediation effect, due to the fact that depression itself does not have any direct influence on social media addiction. Therefore, it can be summarized that materialism does have any direct impacts on stress, depression, or SMA. Moreover, the effects of materialism on SMA can be either direct or mediated through stress.

Several studies have reported that stress (e.g. Zhao and Zhou, 2021; Cannito et. al., 2022) and depression (e.g. Wang et. al., 2018; Haand & Shuwang, 2020; Aydin et.al., 2021; Jasso-Medrano & López-Rosales, 2018; Brailovskaia & Margraf, 2020) were significantly related to SMA. Moreover, the mediating role of depression among adolescents and depression can positively related to materialism (Wang et al, 2020). The psychological insecurity can lead to the increasing adoption of material value.

Nonetheless, since this current study has shown only the effect of stress on SMA, but has not revealed any impact of depression on SMA, it is partially aligned with the previous findings. This indicates that, while materialism and stress do have an effect on SMA in the Thai context, depression does not cause social media addiction in Thai consumers. The insignificant impact of depression on social media addiction can be explained by some studies such as Donnelly & Kuss (2016), Glaser et. al. (2018), and Kircaburun (2016), which revealed that depression, in fact, was found to be a result of social media usage and addiction, and not the other way around. For this reason, the mediation effect of depression between materialism and SMA is also not found in this study. The directions and effects of relationship between materialism, depression and SMA can be further investigated to better understand this passive coping behavior on social media usage.

6. CONCLUSION

This study aimed to explore the negative side of social media usage and to place emphasis among academic and practitioners on the need to monitor the situation closely and utilize appropriate social media tools. Two of the most important findings in this study were to show that materialistic values, especially in collective cultures, will affect social media addiction, and that stress has a mediating effect in the relationship between materialism and social media addiction. As the level of stress increases, it can cause the higher level of social media usage. Therefore, this study helps in explaining the malfunction of social media behavior and the mediating role of stress. This can be beneficial in helping future studies to develop a holistic theoretical model to explain undesirable behaviors associated with social media usage and addiction. Moreover, understanding of the relationship between depression and social media addiction can be further investigated to determine how we can prevent the occurrence of depression and addictive behavior.

6.1 Theoretical Implications

From the rapid expansion of social media, its damaging consequences in terms of addiction and malfunction behaviors are becoming a big issue. More research is needed in order to identify the interventions and holistic theoretical knowledge necessary to understand the pattern of these behaviors (Sun & Zhang, 2021). Theory on coping behavior and effect of stress can be explained in various behaviors; however, there are limited studies exploring stress impact. This study has attempted to explore the mediating effects of stress and depression in the relationship between materialism and social media addiction. Many forms of excessive consumption, such as alcohol addiction, excessing buying, gambling, and other addiction of undesirable behavior, have been found to be coping responses in dealing with stress and a means of attaining short-term relief from a negative emotional state (Moschis, 2007). It has been suggested that future researchers should focus on other forms of addiction behavior as coping strategies for stress. Advanced knowledge of coping strategies will be helpful in informing theoretical development (Burroughs & Rindfleish, 2022). The results in this study elaborated how stress mediates the relationship towards social media addiction. Stress can be a stimuli or predictive variable towards excessive behavior and can also be third variables effect on the material consumption and excessive use of social media.

6.2 Practical Implications

This study has revealed the causes and mediating effects of social media addiction and its consequences, which include behaviors categorized as psychological disorders and negative purchasing behaviors, such as compulsive buying. Social media providers should be cautious of the exposure of content among each group of customers. For example, younger customers should not be exposed to some content, and achieving that will require regulation of user engagement in each platform. As

another implication for business, leaders should reduce stress of their employees to lessen negative impact from social media addiction which may improve productive working environment and employee well-being in the workplace. Also, businesses should be thoughtful when using social media communications to draw attention and trigger online sales conversion with overtly materialistic promotion content. For instance, consumer finance businesses that rely too heavily on enticing customers to overspend without any guilts might be questioned about their social responsibility. Therefore, their corporate brand images might be negatively perceived in the long run.

6.3 Limitations and Future Research Directions

This study was conducted in Bangkok and the data were collected exclusively from Thai working adults due to the higher level of stress and working environment which can enhanced the tendency of addiction in social media. The findings may not be applicable to different regions or different consumer groups. Hence, future studies can consider collecting the data in other provinces of Thailand or other countries to improve generalizability of the findings. Aside from the limitations regarding the geographical and demographical coverage, the variables being investigated were also limited based on the researchers' interest. This study focuses on materialism, stress, and depression as the determinants or mediators which influence social media addiction (SMA). Thus, other factors that may also affect social media addiction, such as self-esteem, life satisfaction, etc., were not included or examined. Moreover, employing stress as a mediator of excessive consumption can be further explored in other behaviors in order to understand the coping strategies and the role of stress in consumer behavior (Moschis, 2007).

In terms of research methodology and data analysis, this study was purely quantitative and did not involve any qualitative data. The reasons regarding why these variables have such relationships, therefore, were not a primary focus of the survey. Due to the limitations described above, the researchers recommend that future studies should either include more variables, or cover other consumer groups. The research method may also employ qualitative data to help explain the phenomenon.

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