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# FACTORS OF SOCIAL MEDIA ADDICTION AMONG COMPUTER STUDENTS IN HIGHER EDUCATION



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## FACTORS OF SOCIAL MEDIA ADDICTIONS AMONG COMPUTER STUDENTS IN HIGHER EDUCATION

SITI NURSOLEHAH BINTI HARON



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DISSERTATION PRESENTED TO QUALIFY FOR A  
MASTER'S DEGREE IN EDUCATION (INTERNET COMPUTING)  
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FACULTY OF COMPUTING AND META-TECHNOLOGY  
SULTAN IDRIS EDUCATION UNIVERSITY

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## ABSTRACT

Social media is perceived as a medium of communication and a source of information. Social media has become popular among adolescents, particularly since it is simple to use and information can be rapidly disseminated. Accordingly, the excessive amount of time spent on social media eventually drives an addiction to social media, known as social media addiction. Previous studies have researched social media addiction. However, a lack of study focuses on computer students. Therefore, this study aims to investigate factors of social media addiction among computer students in higher education. The research design used in this study is a cross-sectional survey, and the sample data is 225 computer students. The sampling was selected using a purposive sampling technique. The instrument in this study were adopted from Griffith (2005) and validated by three experts. Descriptive statistics have been conducted to identify the students' demographic on social media addiction among computer students. Next, to investigate the dominance of social media addiction among computer students, the Confirmatory Factor Analysis (CFA) and Pooled-CFA (Pooled-CFA) has been conducted. The findings have revealed the good fitness indexes (RMSEA: .087; CFI: .931; IFI: .931; TLI: .918; NFI: .894; ChiSq/df: 2.677) for a one-factor model of social media addiction with salience, tolerance, mood modification, conflict, withdrawal and relapse. Then, the pooled-CFA has been conducted to investigate the relationship between social media addiction with salience, mood modification, tolerance, withdrawal, conflict, and relapse among computer students also revealed good fitness indexes (RMSEA: .070; CFI: .958; IFI: .959; TLI: .947; NFI: .923; ChiSq/df: 2.087). Accordingly, this study has filled the gaps in social media addiction among computer students. This study is expected to positively impact computer students, lecturers, universities, and the Ministry of Higher Education (MoHE) in measuring the addiction level to social media.



## FAKTOR-FAKTOR KETAGIHAN MEDIA SOSIAL DALAM KALANGAN PELAJAR KOMPUTER DI INSTITUSI PENGAJIAN TINGGI

### ABSTRAK

Media sosial dianggap sebagai medium komunikasi dan sumber maklumat. Media sosial menjadi popular di kalangan remaja, terutamanya kerana ia mudah digunakan dan maklumat dapat disebarluaskan dengan cepat. Oleh itu, masa yang berlebihan yang dihabiskan di media sosial akhirnya membawa kepada ketagihan media sosial, yang dikenali sebagai ketagihan media sosial. Kajian-kajian terdahulu telah meneliti ketagihan media sosial. Namun, terdapat kekurangan kajian yang memberi tumpuan kepada pelajar komputer. Oleh itu, kajian ini bertujuan untuk mengkaji faktor-faktor ketagihan media sosial dalam kalangan pelajar komputer di institusi pengajian tinggi. Reka bentuk penyelidikan yang digunakan dalam kajian ini adalah tinjauan rentas, dan data sampel adalah 225 pelajar komputer. Sampel dipilih menggunakan teknik persampelan bertujuan. Instrumen dalam kajian ini diadaptasi daripada Griffith (2005) dan telah disahkan oleh tiga orang pakar. Statistik deskriptif telah dijalankan untuk mengenal pasti demografi pelajar terhadap ketagihan media sosial dalam kalangan pelajar komputer. Seterusnya, untuk mengkaji dominasi ketagihan media sosial dalam kalangan pelajar komputer, Analisis Faktor Pengesahan (CFA) dan Pooled-CFA telah dijalankan. Penemuan menunjukkan indeks kesesuaian yang baik (RMSEA: .087; CFI: .931; IFI: .931; TLI: .918; NFI: .894; ChiSq/df: 2.677) untuk model faktor tunggal ketagihan media sosial dengan kepentingan, toleransi, pengubahsuaian mood, konflik, penarikan diri dan pengulangan. Kemudian, Pooled-CFA telah dijalankan untuk mengkaji hubungan antara ketagihan media sosial dengan kepentingan, toleransi, pengubahsuaian mood, konflik, penarikan diri dan pengulangan dalam kalangan pelajar komputer juga menunjukkan indeks kesesuaian yang baik (RMSEA: .070; CFI: .958; IFI: .959; TLI: .947; NFI: .923; ChiSq/df: 2.087). Oleh itu, kajian ini telah mengisi jurang dalam kajian ketagihan media sosial dalam kalangan pelajar komputer. Kajian ini dijangka memberi impak positif kepada pelajar komputer, pensyarah, universiti, dan Kementerian Pengajian Tinggi (KPT) dalam mengukur tahap ketagihan terhadap media sosial.



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## LIST OF ABBREVIATIONS

AMOS	Analysis of a Moment Structures
CFA	Confirmatory Factor Analysis
POOLED-CFA	Pooled-Confirmatory Factor Analysis
PSMU	Problematic Social Media Use
SMASS	Social Media Addiction Scales
SMA	Social Media Addiction
SPSS	Statistical Package for the Social Sciences





## LIST OF APPENDICES

- A Consent Sheet for Student
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## CHAPTER 1

### INTRODUCTION



#### 1.1 Overview

The swift advancement of information and communication technology has resulted in the incorporation of novel instruments referred to as social media, which are regarded as global information sources (González-Padilla & Tortolero-Blanco, 2020; Topino, Gori, Jimeno, Ortega & Cacioppo, 2023). Unlike the internet, which serves several purposes, social media is primarily used for information dissemination. Because of the possibility of fast communication, access to a large amount of information, and widespread dissemination, social media is a platform comprised of Internet-based content production and exchange platform built on Web 2.0 for the user to communicate and share information (Nazari, Hosseinnia, Torkian & Garmaroudi, 2023; Zhuang et al., 2023).



It also provides a virtual area for creating and keeping friendships, as well as exchanging ideas, information, and even real-time movies (Topino et al., 2023). In recent years, social media has become the newest and most popular internet services, causing significant progress in different countries' social systems and a focus of attention because the phenomenon of excessive social media use appears to be impacting user's lives in ways comparable to substance addiction, particularly in the daily lives of adolescents (Boer et al., 2022; Nazari et al., 2023; Tullett-Prado, Doley, Zarate, Gomez & Stavropoulos, 2023). Consequently, there were several social media sites such as Facebook, Instagram, YouTube, Twitter, Snapchat, TikTok, and WhatsApp have been mentioned in the previous studies (Doan et al., 2022; González-Nuevo et al., 2022; Rouleau, Beauregard & Beaudry, 2023; Tullett-Prado et al., 2023; Zhuang et al., 2023; Nazari et al., 2023; Karayigit & Parlade, 2023).

Furthermore, the peak of social media has been noticed during the Covid-19 pandemic, when the frequency of Covid-19 is high (González-Padilla & Tortolero-Blanco, 2020; Rouleau et al., 2023). However, the quick proliferation of social media has become somewhat concerning since it might impact students' everyday lives. As a result, social media may be a double-edged sword with both positive and negative consequences. The rise of social media has affected people's everyday lives in all areas, both positively and negatively, depending entirely on the individual (Al-share, Moqbel & Merhi, 2023). There are numerous potential benefits to adolescent social media use, including increased productivity, cost-effectiveness, and time savings, as well as the ability to connect with others and share, co-create, or exchange various types of digital content, such as messages, photos, videos, and information (Doan et al., 2022; Naslund et al., 2020).

While social media may be beneficial for acquiring information and communicating with others, excessive usage can lead to an addiction known as social media addiction. Social media addiction can be defined as an inability to control one's utilisation of social media and a proclivity to spend hours on social media, which has an impact on one's mental, social, academic, and professional life (Tyagi & Khokhar, 2022; Ying, Rahman & Kiyu, 2022). As a result of the definition provided, it has been demonstrated that social media addiction can cause emotional disorders, low self-esteem, disrupted sleep, poor physical health, and social impairment (Tullett-Prado et al., 2023). Consequently, social media possibly has detrimental effects.

The research on social media addiction focused predominantly on medical students (Khazaie et al., 2023; Latifeh et al., 2022; M. H. L. Lee et al., 2023), adolescents (Boer et al., 2020; Huang, Zhang, Duan, & He, 2023; Victor et al., 2024), university students (Özsat, Işıktaş & Şenol, 2022; Sujarwoto, Saputri & Yumarni, 2023), and beyond; however, the previous research have yet to emphasized regarding the social media addiction among computer students. Not only that, but several prior studies merely focused on university students' addiction to social media (Azizi, Soroush & Khatony, 2019; Puma-Chavez, Quispe-Escobar, Hurtado-Mazeyra, & Llorente Cejudo, 2022; Tyagi & Khokhar, 2022; Sayeed et al., 2023).

Thus, based on previous study, the computer students who are have the high engagement in technology and digital world to be particularly susceptible towards social media addiction, owing to their age (Wei, 2023). The extensive utilization of social media platforms may potentially lead computer students to disregard their

academic responsibilities, resulting in a decline in their academic performance and a tendency to procrastinate (Caratiquit & Jean Caratiquit, 2023). Additionally, excessive use of social media can be a distraction for students, particularly those studying computer subjects. This can have a negative impact on academic performance, as students may procrastinate on academic tasks. The overwhelming amount of information available on social media can make academic tasks seem boring and unpleasant in comparison (Karakaya Özyer & Altinsoy, 2023). Consequently, it is imperative to conduct a thorough investigation into the potential for addiction among technologically proficient populations, particularly computer students, in order to safeguard their overall well-being and ensure their Continue productivity. On that account, there were still scarcity of studies focusing on social media addiction among computer students. Therefore, this study aimed to focus on the factors of social media

## 1.2 Research Background

In today's digital landscape, social media has become an integral part of our lives. Its widespread adoption has revolutionized the way individuals connect and interact with one another, reshaping the dynamics of communication and engagement (Salas-Blas, Merino-Soto, Pérez-Amezcua & Toledano-Toledano, 2022). Simsek et al. (2019), stated that social media addiction should be the latest addiction that occurred after the internet addiction issues. Social media is an Internet-based program that allows users to engage, chat, update their status, and remark while also playing games, listening to music, exploring the web, and exchanging information (Özsat et al., 2022; Zhao, 2023;

Zhuang et al., 2023). The following is a list of social media platforms: Facebook, Instagram, YouTube, Twitter, Snapchat, TikTok, and WhatsApp were mentioned in previous study (Doan et al., 2022; González-Nuevo et al., 2022; Rouleau et al., 2023; Tullett-Prado et al., 2023; Zhuang et al., 2023; Karayigit & Parlade, 2023; Nazari et al., 2023).

Depending on how the person uses social media, it may cause harm or benefit them. As a result, the advantages of using social media have become remarkable opportunities for obtaining information and communicating through social networks; additionally, in educational aspects, it has aided in improving the educational process and teamwork on projects, as well as improving learning outcomes through better communication with students, because social media is easily accessible (Al-Menayes, 2015; Aslan & Tolan, 2022; Azizi et al., 2019a).

Social media is a commonplace in sharing information thus, the information could easily be disseminated faster despite preventive measures. Because social media is widely used for information sharing, information might be disseminated more quickly despite precautionary steps (González-Padilla & Tortolero-Blanco, 2020; Lee et al., 2020; Puma-Chavez et al., 2022; Bağcı, 2022). As a result, despite the benefits of social media, excessive usage of social media may result in an addiction known as social media addiction.

The excessive and preoccupied use of social media has resulted in significant damage or distress (Teng et al., 2023; Wei, 2023). Aside from that, the addiction has

been characterised as a behavioural addiction that may lead to being reliant on social media and being too worried about social media as a result of an uncontrolled impulse to use social media (Haand & Shuwang, 2020; Puma-Chavez et al., 2022; Ali Homaid, 2022; Tyagi & Khokhar, 2022; Zhuang et al., 2023). Previous research has focused on the negative side effects of social networking; the study was carried out in Kuwait focusing on their students. From a psychological standpoint, extroverts may spend more time on social media monitoring how many 'likes' they received on their recent post or how many 'likes' they get while changing their profile photo on social media (Al-Menayes, 2015).

Being overly concerned about social media will lead to addiction and cause mental illness (Naslund et al., 2020). Thus, based on the sample data collected in Anhui Province, China, studies in China have revealed that social media addiction may harm the mental health of university students (Zhao, 2023). Studies by, Naslund et al. (2020) and Zhuang et al. (2023), addiction to social media affects poor sleep quality and has resulted in mental disorders such as depression, anxiety, stress, and psychosomatic illness. Since social media has grown to be so prevalent among college students, other research has focused on academic accomplishment (Karayigit & Parlade, 2023).

Addiction to social media can have a detrimental impact on a student's life since they are more likely to engage in social media and ignore their schoolwork (Topino et al., 2023). The research on social media addiction in Malaysia yields the same results about the harmful influence on student's academic performance in the long run (Zaw & Nur Amira, 2023; Zhuang et al., 2023). Besides, the students in computer fields often

possess a high level of internet proficiency and dedicate a significant portion of their time to online activities, as necessitated by the nature of their studies (Al-Adwan et al., 2023). Consequently, computer students often find themselves excessively engaged in online activities due to a lack of awareness of the real world. This can lead to social media addiction, as the familiarity and comfort with social media platforms can easily entice individuals into pleasure-seeking behaviors, such as excessive social media use (Nadarajan, Hengudomsub & Wacharasin, 2023).

Furthermore, the excessive use of social media subsequently resulted in academic procrastination and could significantly impair computer students' mental health and well-being. Moreover, this behavior has been identified as a common occurrence among students in higher education, as they are often physically distant from their families and must adapt to new self-learning behaviors (Anierobi, Etodike, Okeke & Ezennaka, 2021; Nadarajan et al., 2023). Therefore, this study focused on computer students in higher education to address the gap in research, as no prior studies on social media addiction among these students have been identified.

### 1.3 Problem Statements

Social media addiction has resulted from excessive use. As an outcome, social media addiction has negative repercussions such as psychological impairment, dysfunction, and distress (Haand & Shuwang, 2020; Teng et al., 2023; Wei, 2023). Following that, excessive usage of social media leads to addictive behaviour, which has been

characterised as being overly concerned, unmanageable, and unable to control from logging on or using social media, among other adverse effects (Haand & Shuwang, 2020; Puma-Chavez et al., 2022; Tyagi & Khokhar, 2022; Ali Homaid, 2022; Zhuang et al., 2023).

Henceforth, students may now experience psychological damage, and fear of missing out (FoMO), which explains why students typically spend more time on social media and actively forego other virtual activities (Al-Menayes, 2015; Topino et al., 2023). In addiction a study by Naslund et al. (2020), the social media could affect the mental health and well-being of students regardless of age, education level or background. Thus, spending too much on social media eventually could lead to an addiction, which consequently leads to mental impairment (Zhao, 2023).

The excessive use of social media, defined as more than 5 to 8 hours daily, can lead to sleep deprivation (Setyowati, Kurnia, Lestari & Karuncharernpanit, 2023). In addition to mental health concerns, poor sleep quality should also be addressed, as it can contribute to mental disorders and impact students' academic performance (Karayigit & Parlade, 2023; Naslund et al., 2020). According to the National Sleep Foundation, adults should aim for 7 to 9 hours of sleep. However, over a third (36%) of young adults aged 18 to 29 report difficulty waking up and sleeping due to excessive time spent on social media chat applications. Therefore, given the focus on university students, several studies have examined the negative impact of social media addiction on academic performance (Setyowati et al., 2023).

Consequently, the reliance on or preoccupation with social media may lead students to neglect their academic responsibilities, resulting in concerns about academic procrastination and declining academic performance, particularly among computer students (Topino, Gori, Jimeno, Ortega & Cacioppo, 2023; Zaw & Nur Amira, 2023; Zhuang et al., 2023). In addition, the excessive use of social media can have a detrimental effect on computer students in particular, causing stress and depression, which can negatively impact their quality of life (Nazari, Hosseinnia, Torkian & Garmaroudi, 2023). A prior research appeared to concentrate more on mental health well-being and academic performance resulting from addictive behavior towards social media among higher education students. However, there is still a dearth of prior studies focusing on social media addiction among computer students in higher education, particularly in Malaysia. Hence, the objective of this study was to specifically focus on factors of social media addiction among computer students in higher education in Malaysia.

#### 1.4 Research Objectives

This study aimed;

- i. To identify students' demographic on social media addiction among computer students in Malaysian.
- ii. To investigate the dominance of social media addiction among computer students in Malaysian.

- iii. To investigate the relationship between social media addiction with salience, mood modification, tolerance, withdrawal, conflict, and relapse among computer students in Malaysian.

## 1.5 Research Questions

The following research questions for this study;

- i. What are the demographics of Malaysian computer students on social media addiction?
- ii. What is the dominant social media addiction among computer students in Malaysian?
- iii. What is the relationship of social media addiction with salience, mood modification, tolerance, withdrawal, conflict, and relapse among computer students in Malaysian?

## 1.6 Research Hypothesis

The following research hypotheses in this study;

H1: There is a significant relationship between salience with tolerance.

H2: There is a significant relationship between salience with mood modification.

H3: There is a significant relationship between salience with withdrawal.

H4: There is a significant relationship between salience with conflict.

H5: There is a significant relationship between salience with relapse.

H6: There is a significant relationship between tolerance with mood modification.

H7: There is a significant relationship between tolerance with withdrawal.

H8: There is a significant relationship between tolerance with conflict.

H9: There is a significant relationship between tolerance with relapse.

H10: There is a significant relationship between mood modification with withdrawal.

H11: There is a significant relationship between mood modification with conflict.

H12: There is a significant relationship between mood modification with relapse.

H13: There is a significant relationship between withdrawal with conflict.

H14: There is a significant relationship between withdrawal with relapse.

H15: There is a significant relationship between conflict with relapse.

## 1.7 Conceptual Framework and Theoretical Framework

A theoretical framework is the theories underlying based on the previous study about the terms related to the current study to guide the researcher, while the conceptual framework is used to show an illustration of what this study plans to examine in this study.



## 1.8 Theoretical Framework

The theoretical framework is an aid in research which is obtained by incorporating relevant theoretical elements from previous studies. Hereby, is the providing descriptions and references to inform the current studies investigation. In this study, several theories have been implied which are Behavioural Learning Theory (Davis, 2001) and Behaviour Addiction Theory (Robbins & Clark, 2015). The theoretical will be shown in Figure 1.1 below.



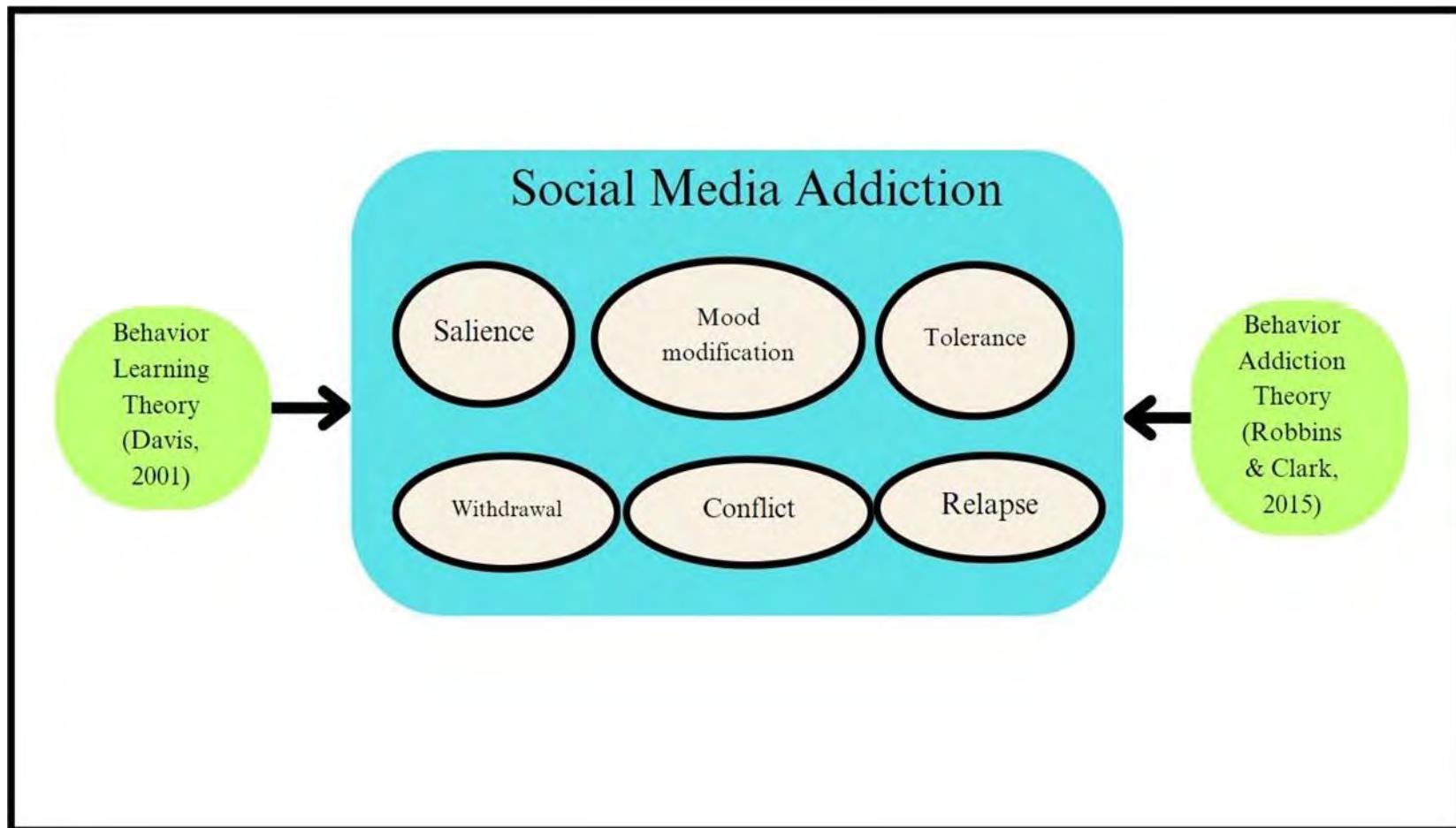


Figure 1.1. Theoretical framework

### 1.8.1 Behavioural Learning Theory

The learning behavioural theory in this study was to support the addictive behaviour among computer students toward social media. According to Davis' (2001), the behavioural theory could be knowledge to either identify the addictive behaviour of social media addicts or help identify the symptoms of addictive behaviour of social media addictions. In this study, the behavioural theory by Davis (2001) has been used in most previous studies to indicate students' behaviour toward social media use in their daily routine which implicated their life because of addictive behaviours.

### 1.8.2 Behaviour Addiction Theory

Behavioural addiction has slowly become recognised as a valid category in describing psychiatric disorders as being shown in the allocation of pathological gambling and also can be used in investigating addictive behaviours (Robbins & Clark, 2015). This study was to leverage the theory of behavioral addiction to elucidate the computer students' behaviors concerning social media addiction. Specifically, it aims to understand how students engage with social media in their daily lives and whether such engagement leads to adverse effects, such as salience, mood modification, tolerance, withdrawal, conflict, and relapse.

### 1.8.3 Conceptual Framework

The conceptual framework below is shown in Figure 1.2, the relationships between the Social Media Addiction constructs between each other and the hypothesis. This study aimed to investigate the relationship between social media addiction in higher education among computer students by using six (6) constructs. There were 15 hypotheses to measure the significant relationship within the constructs such as; the relationship of salience with tolerance, mood modification, withdrawal, conflict, relapse, and vice versa.

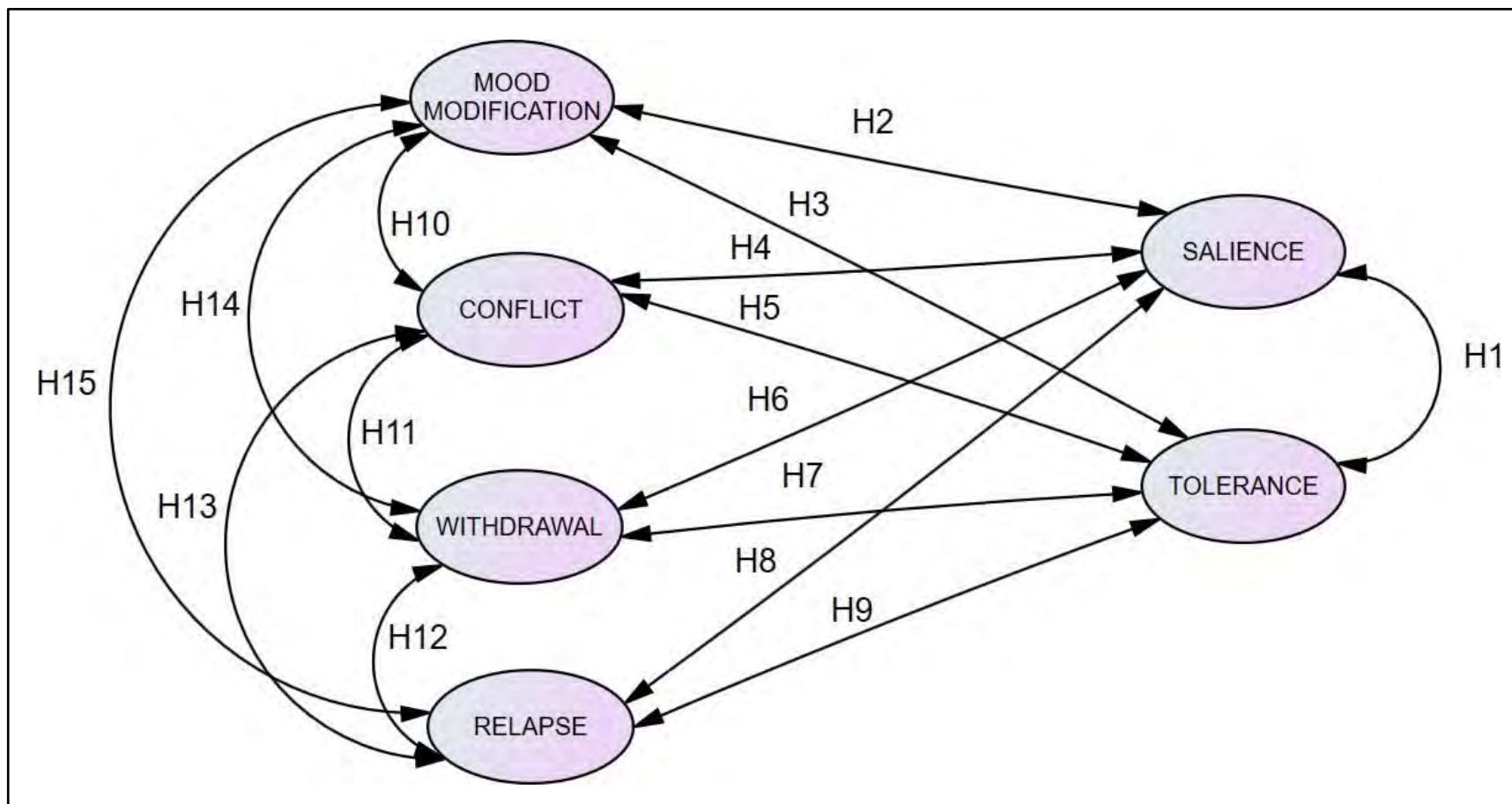


Figure 1.2. The relationship between social media addiction with salience, mood modification, tolerance, withdrawal, conflict, and relapse among computer students.

#### 1.8.4 Social Media Addiction

The excessive use of social media can lead to social media addiction. Social media addiction is also known as problematic social media use (PSMU). Social media addiction is a form of internet addiction since social media addiction can be classified as one of the internet addiction types (Hou et al., 2019). Social media addiction refers to the uncontrollable urge to log on to and use social media (Hou et al., 2019). According to Griffiths, (2005), there was a component model to measure social media addictions, which is salience, mood modification, tolerance, withdrawal, relapse, and conflict (Balcerowska et al., 2022). Social media addiction, also known as the Social Media Addiction Scale (SMASS) eventually, has been comprised by Andreassen et al., (2012) which is constructed based on the general addiction theory (Balcerowska et al., 2022).

Next, Griffiths, (2000) mentioned the six cores of components, which are salience, mood modification, tolerance, withdrawal, conflict, and relapse (Monacis et al., 2017). A study by Andreassen, (2015), has developed the Bergen Social Media Addiction (BSMAS) to overcome the aforementioned drawbacks and was adopted from the Bergen Facebook Addiction Scale (BFAS) by Andreassen et al., (2012). The arrangement in the Likert scale point to measure is based on (Lin et al., 2017). Hereby is the being said of the six core components proposed by Griffiths (2000), who adapted it from (Young, 1996) of Internet Addiction Test (IAT).

#### 1.8.4.1 Salience

Salience is one of the six components that were proposed by Griffiths, (2005). Salience is also known as thinking and behaviour that is dominated by activity (Huang et al., 2023). In this study, the main focus in using salience as one of the core components in measuring the addictive behaviour of social media addiction was by assuming salience as the other implicit cognitive process in enhancing the addiction motivation together with craving (Huang et al., 2023).

Next, the other term that aligns with salience is the preoccupation with the behaviour (Turel, Brevers & Bechara, 2018). Salience as the six-core component in social media addiction can be seen as uncontrollable motivation to perform the behaviour (Turel et al., 2018). In this study's findings, using salience was to measure the preoccupied behaviour with time distortion. Thus, salience in this study was to measure the behaviour of computer students on social media and how long they are occupied with social media.

#### 1.8.4.2 Tolerance

Tolerance is also known as reflected in the characteristics of the craving (Huang et al., 2023). The study's purpose in tolerance use is to measure the amount of activity achievement based on the previous effects (Huang et al., 2023). Next, the other studies have relied on tolerance components as the process increases social networking activity

(Simsek, Elciyar & Kizihan, 2019). In addition, tolerance can be described as someone who engages in social networking as they gradually increase the amount of time they spend on social media (Simsek et al., 2019).

Other papers have described tolerance as the increasing engagement in the behaviour over time to attain initial mood modifying effects (Turel et al., 2018). In this study tolerance was to examine the portion of time of computer students engages in social media in their daily lives.

#### 1.8.4.3 Mood Modification

The term mood modification is to reduce the feeling of guilt, anxiety, restlessness, helplessness, and depression (Andreassen et al., 2015). To sum up, the phrase mood modification reflected the feelings and emotions of the addicted user as to why they were too attached to social media. Next, the other phase of mood modification is paradoxically which abstained from the tranquil of escaping and numbing of their emotions (Simsek et al., 2019). In conclusion, the prior study offered alternative terms for rephrasing the mood modification to make it suitable for their study. Therefore, in this study, the mood modification was to examine the feelings and emotions of computer students regarding socializing with their friends or choosing to engage with social media.

#### **1.8.4.4 Withdrawal**

Withdrawal is also known as withdrawal symptoms. The term withdrawal is the unpleasant feeling state or physical effects that occur when a person is unable to engage with social media because of illness, vacation, or being prohibited (Simsek et al., 2019).

Withdrawal in other terms is limited self-control and like hood of reversion (Baumer et al., 2015). To conclude, withdrawals in wording are the feeling of restlessness when social media is being prohibited from using. The measuring of withdrawal also can be different regardless of the need for research.

Other research mentioned the symptoms of withdrawal, which are stress, restlessness, trouble, or irritability (Andreassen et al., 2015). Hence, the withdrawal symptoms in this study was to be a guide to researchers in measuring the level of withdrawal symptoms in social media computer students which the measure would be the irritability, stress, anxiety, and restlessness.

#### **1.8.4.5 Conflict**

The term conflict has been used in measuring the negative effects of social media addiction. A significant problem arises when the social media addict between family, friends, or strangers when they are too attached to social media without composing themselves between virtual and reality. Next, conflicts can influence relationships such as conflict with family, conflict at work or school, and social conflicts (Andreassen et

al., 2015). Conflict also has been known as preoccupation with addictive activity (Shin, 2022).

Additionally, the other paper also stated the different terms of conflict, which is functional impairment (Huang et al., 2023). Thus, this study reflected the conflict or problems of computer students might encounter if they were too occupied with social media regardless of time.

#### **1.8.4.6 Relapse**

Relapse is known as discontinuation, and studies have retorted relapse is the tendency to recur addictive behaviours (Shin, 2022). The other term of relapse is also known as loss of control (Huang et al., 2021). Relapse is referred to the behaviour of trying to abstain from using social media; however, the abstained is unsuccessful (Turel et al., 2018). The tendency to repeat the same behaviour is the wording for relapse (Simsek et al., 2019).

In this study, relapse has been used in measuring the tendency of how many times the addiction would occur and be disrupted to cut down the time spent in social media. Subsequently, relapse in this study was to examine the behaviours of repeated cut-down unsuccessful attempts among computer students.

## 1.9 Research Scope

There are several scopes of this study, which are computer students, social media addiction, subject matter, and higher education students.

### 1.9.1 Computer Students

This study was carried out at one University in Malaysia. The participants were the computer students who studied in Malaysia regardless of their nationality.

### 1.9.2 Social Media Addiction

This study focused on the social media addiction scale to measure the level of social media addiction among computer students proposed by Griffith (2005). There are six (6) constructs in Social Media Addiction (SMASS) involved in this study. In this study, the constructs were used as follows;

- i. Salience
- ii. Tolerance
- iii. Mood Modification
- iv. Withdrawal

v. Conflicts

vi. Relapse

### 1.9.3 Subject Matter

The study focused on the subject matter of Computer courses. The participants who are computer students who have fulfilled the selected categories background, will be included in this study to measure their addictive behaviour towards social media. In this study, the selected categories were as follows;

- i) Undertake the Computer related courses.
- ii) Enrolled in one of Malaysia University.

### 1.9.4 Higher Education Students

This study focused on higher education students, however, some categories had to be followed. In this study, the following categories were decided based on;

- i) Level of education: Bachelor with Honours.
- ii) Enrolled in the Faculty of Computing and Meta-Technology.

## 1.10 Significance of Study

This study gave significance to several parties such as; computer students, lecturers, the University, and the Ministry of Higher Education.

### 1.10.1 Computer Students

The computer students who participated in this study can benefit from gaining awareness of their social media usage patterns in daily life and evaluating whether it qualifies as an addiction. Students should be aware of the following;

#### i. Awareness towards excessive use on social media

Students were properly conscious that excessive social media usage might lead to social media addiction.

#### ii. Mental Health and Well-being

Computer students were appropriately informed on the consequences of social media addiction, which can lead to mental health issues such as sadness, anxiety, and stress. Furthermore, the ethics of computing usage must be taught to prevent computer

students from using their specialty to commit crimes such as hacking, cyber-threatening, or defrauding others of their money.

### **1.10.2 Lecturer of University**

The potential for computer students to develop social media addiction presents an opportunity for lecturers to address mental health issues and psychological disorders that often accompany such addiction. By being more aware of their students' social media habits, lecturers can take proactive measures to prevent a decline in academic performance.

### **1.10.3 University**

The universities eventually gained benefits as they took preventive measures to avoid addictive behaviour among students, which resulted in psychological and psychosocial problems. Thus, here are several pieces of information that universities could gain;

#### **i. Awareness towards excessive use on social media**

An institution was suggested to take preventive steps to reduce the use of technology in the classroom, and another technique to attract students' attention was considered.

## ii. Policy and Intervention Recommendations

The university was recommended to prepare professional counsellors to counsel computer students. Not only that, but the university was also suggested to promote an ethics talk about how to use social media responsibly for computer students. This talk was aimed at preventing them from using social media in a negative way besides learning to protect themselves from being attacked by cyber-criminals and cyber bullies.

### 1.10.4 Ministry of Higher Education

Measuring addictive behaviour computer students in Malaysia towards social media addiction.

## i. Policy and Intervention Recommendations

This study suggested that the Ministry of Higher Education can start with an education campaign for awareness purposes focusing on the pros and cons of digitalization and social media browsing without restrictions.

## 1.11 Operational Definitions

This is the following operational definitions used in this study:

### 1.11.1 Social Media Addiction

Social media addiction, also known as problematic social media use (PSMU), can be defined as excessive, compulsive, or uncontrollable behaviour while spending time on social media, which led to impairment in aspects of daily life (Ali Homaid, 2022; Zhao, 2023). In this study, social media addiction scales (SMASS) were used as an instrument to measure an addiction to social media.

#### 1.11.1.1 Salience

Salience, a key component of social media addiction scales (SMASS), represents the behavior that dominates an individual's life (Rouleau et al., 2023). It refers to the constant preoccupation with social media and the deliberate allocation of time to engage with it. In this study, salience was defined as the prioritization of social media, serving as a metric to gauge the significance computer students in higher education attach to social media.



### 1.11.1.2 Tolerance

Tolerance, within the context of social media addiction, refers to the phenomenon where users require increasing levels of stimuli (such as spending more time on social media) to achieve the same dopamine reaction (Peng & Liao, 2023). As this tolerance builds, dependence can develop, leading users to rely on social media interaction to feel normal and the addicted user needs to spend more time on social media to be satisfied (Puma-Chavez et al., 2022). This study used the tolerance component in measuring the intensity of Malaysian computer students' place on social media tolerance, and whether they could hold back their urge to use social media or the opposite.



### 1.11.1.3 Mood Modification

The component mood modification can be described as the way to forget about problems while using social media (Peng & Liao, 2023). Rouleau et al., (2023), mood modification is also defined as user engaging behaviour when using social media. In this study, mood modification was to be used to measure the Malaysian computer student's behaviour when using social media and whether they use social media to loosen up and forgetting their problems.



#### 1.11.1.4 Withdrawal

Withdrawal is the fourth component which can be defined as anxiety and irritable feelings when the user needs to stop using social media for a certain time (Rouleau et al., 2023). Besides, withdrawal is also described as trouble feelings or uneasiness when the user is unable to use social media (Peng & Liao, 2023). In this study, the withdrawal component was designed to gauge the sentiments experienced by Malaysian computer students when they are unable to access social media during a specified period.

#### 1.11.1.5 Conflict

Conflict can be defined as a negative impact that happens in addictive user's life media (Peng & Liao, 2023). In this study, conflict was used to measure the negative consequences of using social media for excessive amount of time for the Malaysian computer students.

#### 1.11.1.6 Relapse

The final component was relapse which can be defined as repetition of behaviour (Rouleau et al., 2023). Besides, relapse also can be described as a failure in cutting down social media or repetitive behaviour which makes the addictive user fail to cut down social media (Peng & Liao, 2023). In this study, relapse was used to measure the



behaviour of the Malaysian computer students and whether they ever tried to cut down the social media but failed to do so.

## 1.12 Summary

This chapter has covered the overview, background, problem statement, research objective, research questions, hypothesis, scope and limitations, the significance of this study, operational definition, and theoretical framework has been detailed in this chapter.

