



ASSOCIATIONS BETWEEN TYPES OF SOCIAL MEDIA USE, SOCIAL ANXIETY & LONELINESS AMONG USM STUDENTS

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DECLARATION

I hereby declare that this thesis is the result of my independent work and research and has not been submitted, either in whole or in part, for the award of any degree or diploma at any other institution of higher learning. All sources of information and data used in this thesis have been properly acknowledged and referenced according to the accepted academic standards. I affirm that I have upheld the principles of academic integrity and honesty throughout the course of this research.

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ABSTRACT

The extensive social media use among higher education students has concerns surrounding its influence on their social anxiety and loneliness. The general objective is to study the impact of social media use types (consumption, image, comparison, & belief-based) on mental health outcomes of USM Health Campus undergraduate students. A quantitative, cross-sectional online survey was conducted with 85 full-time undergraduate students from Universiti Sains Malaysia (USM) Health Campus. Questionnaires such as Social Media Use Scale (SMUS), Social Interaction Anxiety Scale (SIAS), and UCLA Loneliness Scale 3rd edition were used to collect data from the study's sample. Descriptive statistics, inferential statistics such as Pearson's correlations & multiple regression was run and findings were reported. Results showed that consumption use type had a significant positive correlation with social anxiety and significantly predicted social anxiety. This suggests higher consumption levels are associated with elevated social anxiety. Conversely, comparison use type had a significant positive correlation with loneliness & significantly predicted. Image and Belief-based use didn't significantly predict either outcome or had any significant correlations with the dependant variables. The study advocates for targeted psychoeducational interventions focusing on reducing maladaptive consumption and comparison behaviors to foster healthier social media use and mitigate adverse effects on student mental health.

Keywords: Social Media, Social Anxiety, Loneliness, Consumption-Based Use, Comparison-Based Use, University Students, Mental Health

ABSTRAK

Penggunaan media sosial yang meluas antara kalangan pelajar menimbulkan kebimbangan mengenai pengaruhnya terhadap kegelisahan sosial dan kesunyian mereka. Kajian ini menangani jurang dalam memahami cara jenis penggunaan khusus (penggunaan, imej, perbandingan & kepercayaan) mempengaruhi kesihatan mental. Tinjauan keratan rentas kuantitatif telah dijalankan terhadap 85 pelajar sarjana muda sepenuh masa dari Kampus Kesihatan USM. Soal selidik seperti SMUS, SIAS, dan UCLA Loneliness Scale edisi ke-3 digunakan untuk mengumpul data daripada sampel kajian. Statistik deskriptif, statistik inferensi seperti korelasi Pearson & regresi berganda telah dijalankan dan penemuan telah dilaporkan. Keputusan menunjukkan bahawa penggunaan berpusatkan penggunaan mempunyai korelasi positif yang signifikan dan diramalkan dengan ketara bagi kegelisahan sosial dengan ketara. Ini menunjukkan tahap penggunaan yang lebih tinggi dikaitkan dengan kebimbangan sosial yang tinggi. Sebaliknya, penggunaan sentrik perbandingan mempunyai korelasi positif yang signifikan dan diramalkan dengan ketara bagi kesepian. Penggunaan berasaskan Imej dan Kepercayaan tidak meramalkan sama ada hasil atau mempunyai sebarang korelasi yang signifikan dengan pembolehubah bersandar. Kajian ini menyokong intervensi psikopendidikan yang disasarkan yang memberi tumpuan kepada mengurangkan penggunaan maladaptif dan tingkah laku perbandingan untuk memupuk penggunaan media sosial yang lebih sihat dan mengurangkan kesan buruk terhadap kesihatan mental pelajar.

Kata Kunci: Media Sosial, Kegelisahan Sosial, Kesunyian, Penggunaan Berasaskan Pasif, Penggunaan Berasaskan Perbandingan, Pelajar Universiti, Kesihatan Mental

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LIST OF ABBREVIATIONS

APA	American Psychological Association
DSMM	Differential Susceptibility to Media Effects Model
FOMO	Fear of missing out
JEPeM	Jawatankuasa Etika Penyelidikan Manusia
QR	Quick Response
PPSG	School of Dental Sciences
PPSK	School of Health Sciences
PPSP	School of Medical Sciences
SAD	Social Anxiety Disorder
SD	Standard Deviation
SIAS	Social Interaction Anxiety Scale
SM	Social Media
SPT	Social Penetration Theory
SMUS	Social Media Use Scale
UGT	Uses and Gratifications Theory
USM	Universiti Sains Malaysia
WHO	World Health Organisation
SPSS	Statistical Package for Social Science

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Social networking sites has been an essential part of everyone's life, even college students, thanks to the contemporary modern era of digitalization. Such platforms have redefined on how students interact, socialize, and perceive themselves and with one another(O'Day & Heimberg, 2021). In addition to reform communication styles, the widespread use of social media sites such Facebook, Instagram, & TikTok has also

sparked significant debate over the effects of these platforms on individuals' mental health.

The World Health Organization's (WHO) World Mental Health (WMH) survey, encompassing data from 21 countries, shows us that a significant proportion of university students faces mental health challenges. Specifically, around one-fifth or 20.3% of university students has been screened positive for a mental disorder within a one-year period (Auerbach et al., 2016). The low treatment rate with just only 16% of these screened students with positive mental health concern has reported of receiving any form of intervention during the same period is very concerning (Auerbach et al., 2016). The vast difference between the people with mental health challenges and the availability of care for them emphasises the necessity of comprehending such elements that can lead to these difficulties.

Among Southeast Asian countries, the matter of student mental health is equally important. Study by Dessauvage et al (2021) show that students in this region face significant rates of mental health difficulties, which includes depression (29.4%), anxiety (42.4%), stress (16.4%), and disordered eating (13.9%). Likewise, that study also highlighted that a significant percentage, approximately 7% to 8% of these students reported current suicidality (Dessauvage et al., 2021). These statistics call attention to the urgency of examining the contributing factors that may influence such mental health outcomes amongst higher education students in this region.

As social networking sites develop and grow, they continue to be a central force in almost every student's lives, hence, it is crucial for us to understand the psychological impacts linked with different types of usage. While past research has explored the influence of social networking sites on mental health (Boursier et al., 2020), a more detailed understanding of how certain usage styles and/or patterns may affect students in culturally unique and diverse contexts, such as Malaysia, is very much needed. Through investigating the relations between 4 distinct forms of usage with mental health outcomes namely, social anxiety and loneliness among Malaysian undergraduate students at USM Health Campus, this study also seeks to close this gap.

The growing use of social media amongst students and the related worries of its impact on loneliness and social anxiety serve as the foundation for this study. Findings from Auerbach et al. (2016) and Dessauvagie et al. (2021) in related matter has highlighted the significant prevalence of mental health challenges among students, both global context as well as in Southeast Asia countries context, underscoring the need for further investigation.

1.2 Problem Statement and Study Rationale

University students are among the large users of social networking sites (Le Gall et al., 2020), yet our grasp on how each different use types affect its user's mental health remains limited. Existing papers about social media & mental health currently reveal several significant gaps. The main research gap is the inability to distinguish between

different forms of use types of social networking sites. Many studies previously had treated social media as a homogeneous entity, falling short to distinguish between the various forms and purposes of use. O'Day & Heimberg (2021) stress the need for differentiating between the types of activities in social media, as they can have different psychological impacts. Aalbers et al. (2019) similarly highlight the necessity of differentiating between forms of use to better grasp its distinct effects on users.

The results of an exploratory factor analysis have found that a 4-factor model the types of social media use Tuck & Thompson (2023). It was identified that belief-based, consumption-based, image-based, and comparison-based dimensions (Tuck & Thompson, 2023). To be exact, there is a slit in knowledge regarding how these use type influence loneliness & social anxiety. The lack of knowledge impedes the development of focused interventions meant to lessen the detrimental effects of social media use on susceptible student groups, such as students at Universiti Sains Malaysia (USM). Hence, focusing on these 4 distinctive social media use types specifically because each of them represents an individual mode of engagement with potentially unique psychological outcome/s. As highlighted by Boursier et al. (2020), how each user interact with such platforms can vary differently from one another, and such differences can have various influence on their respective mental health.

Students' mental health may impact differently by each form of social media use. Let's take consumption-based usage, as an example, which includes passivity such as viewing movies or skimming through feeds without social interaction. Increased emotions of loneliness and decreased wellbeing are frequently associated with this type

of interaction (Choi et al.,2025). Image-based use, with its emphasis on the sharing and viewing of visual content, such as photos and videos, which can influence self-esteem and body image due to the emphasis on visual self-presentation. Comparison-based use, as explored by Boursier et al. (2020), often fosters feelings of inadequacy, which can exacerbate social anxiety and loneliness as it includes activities where individuals compare themselves to others. Belief-based use pertains to the engagement with cultural, ideological, and/or religious content, which can foster a sense of community among one another or rouse stress when encountering conflicting views. This study attempts to uncover actions that may lead to poor psychological states by classifying social media use types into six distinct categories. The results of this study can guide the creation of support networks and focused mental health therapies that are suited to the unique requirements of college students. For instance, interventions can be planned to aid students in controlling their tendency to participate in unfruitful social comparisons if comparison-based use were to be discovered to be a substantial predictor of social anxiety.

Research Questions

The research questions that follow are intended to be addressed by this study:

1. Does social media use types has a significant relationship with the levels of social anxiety among students?

2. Does social media use types has a significantly relationship with the levels of loneliness among students?
3. Does social media use types significantly predicts the levels of social anxiety and loneliness among students?

1.3 General and Specific Objectives

The general objective of this study is to study the impact of social media use types on mental health. The specific objectives of this study are as follows:

1. To determine the relationship between different types of social media use (consumption-based, image-based, comparison-based, belief-based) and levels of social anxiety among USM Health Campus students.
2. To determine the relationship between different types of social media use (consumption-based, image-based, comparison-based, belief-based) and levels of reported feelings of loneliness among the USM Health Campus students.
3. To assess which type/s of social media use would be stronger

predictor of for social anxiety and loneliness.

1.4 Significance of the Study

This study is crucial for better understanding the complex interaction between higher education students' mental health and their respective usage of social networking sites. This study has the potential to guide the creation of focused treatments and support networks intended to promote improved mental health outcomes for its users by analysing the distinct impacts of particular social media use patterns. Additionally, this study can help mental health practitioners better understand how social media use might affect their therapeutic clients. By producing evidence-based information that may be successfully used to alleviate the negative impacts associated with social media usage, this research ultimately aims to further the broader objective of boosting the mental health and well-being of university students.

1.5 Definition of Variables

1.5.1 Conceptual Definition

Social media refers to digital platforms that allow users to create, share, interact with, and consume content in various forms such as text, images, videos, and links (Kaplan & Haenlein, 2010). These platforms have become essential tools for communication, self-expression, and the development of social connections in contemporary society. Social anxiety is conceptually defined as a persistent fear of social situations where

individuals anticipate possible embarrassment, judgment, or negative evaluation by others (American Psychiatric Association, 2013). This fear often leads to avoidance behaviours and can significantly impair social functioning and well-being (Mattick & Clarke, 1998a). Loneliness is understood as a subjective emotional state characterized by feelings of social isolation and dissatisfaction with one's social relationships. It involves the cognitive perception of being alone or disconnected, regardless of the actual presence of social interactions (Russell, 1996).

As per Tuck & Thompson (2023), we now know there are 4 types of use and let's take a deeper look into every one of them, starting from consumption. Consumption-based use refers to passivity in using social media. For example, browsing through stories, reels on feeds and explore page, going through posts, or watching content with the absence of active interaction from its users which includes commenting, sharing etc.

On the other hand, Image centric use includes the posting and viewing content which are visual based, such as photos, videos, etc which might play a role in users' perception of self as well as their body image.

Moving on with Comparison centric use encompasses behaviours where individuals compare their lifestyle, appearance, and achievements to those of others on social platforms. This may contribute to inadequacy feelings as well as social disconnection (Boursier et al., 2020).

Lastly, Belief centric use pertains to the engagement with content that are relatable with respective user's cultural, religious, ideological, or their own values, joining in online communities that share such similar beliefs and interests (Tuck & Thompson, 2023).

1.5.2 Operational Definition

In this study, social media use types are operationalized through the Social Media Use Scale (SMUS) developed by (Tuck & Thompson, 2023). The SMUS specifically measures four domains of social media engagement which are consumption-based, image-based, comparison-based, and belief-based use. Each of the use type is assessed using a series of items which are self-reported, that quantify the frequency and extent of participants' usage behaviours in social media platforms.

Social anxiety is operationally defined by scores obtained from the SIAS. It is a self-report instrument that assesses the degree of anxiety individuals experience during social interactions (Mattick & Clarke, 1998a). A high score on the scale reflects higher levels of reported feeling of social anxiety. Loneliness is measured using the UCLA Loneliness Scale, which evaluates the subjective experience of social isolation & dissatisfaction with social relationships (Russell, 1996). Higher scores on this scale reflect more pronounced feelings of loneliness. These instruments collectively enable

the precise measurement of the key variables in this study, facilitating the examination of their interrelationships.

1.6 Theoretical Approach

Theoretical frameworks that aid in explaining the connection between social media use and mental health serve as the foundation for this investigation. According to the uses and gratifications theory, people deliberately utilise media to satisfy needs and wants. In the context of this study, students may engage in different types of social media use to satisfy various social and psychological needs. Knowing these reasons can help explain why some forms of social media use are more closely linked to loneliness and social anxiety. Social comparison theory, particularly relevant to comparison-based social media use, suggests that individuals have a natural tendency to evaluate themselves by comparing themselves to others. As demonstrated in studies such as (Boursier et al., 2020), social media platforms provide ample opportunities for social comparison, which can lead to feelings of inadequacy and contribute to social anxiety and loneliness.

1.7 Conceptual Framework

Independent Variables: Social Media Use Type

Dependent Variables: Social anxiety, Loneliness

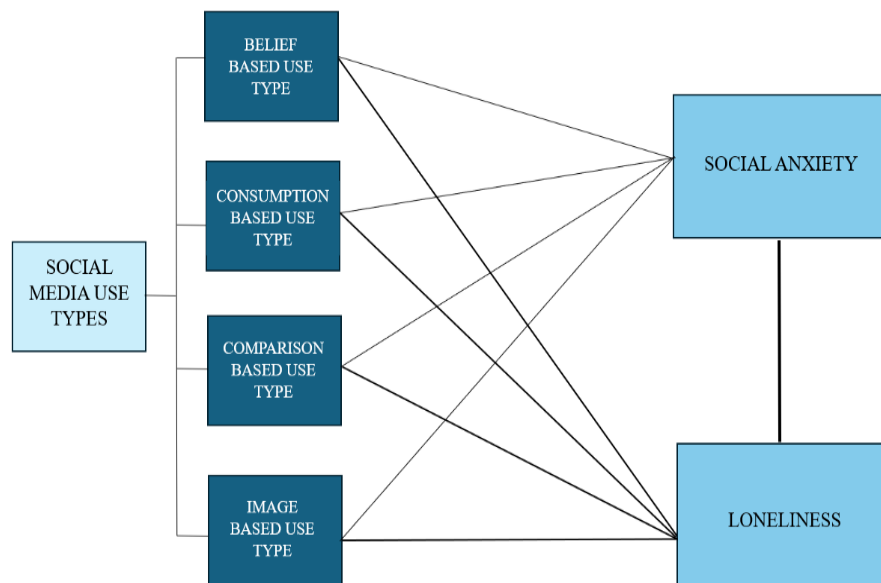


Figure 1.1 The Conceptual Framework

1.8 Hypothesis of the Study

- a. There is a significant relationship between types of social media use (consumption-based, image-based, comparison-based, belief-based) and social anxiety.
- b. There is a significant relationship between types of social media use (consumption-based, image-based, comparison-based, belief-based) and loneliness.
- c. Comparison-based and image based social media use are stronger predictors of social anxiety than consumption-based and belief-based use
- d. Comparison-based and consumption based social media use are stronger predictors of loneliness than consumption-based and belief-based use.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The start of social media (SM) has changed the ways we communicate, express ourselves, and take in information, with university students emerging as one of the most digitally engaged populations. This demographic, especially those aged from 18 to 25, is in the developmental stage of emerging adulthood, a phase of life marked by identity exploration, instability, and self-focus (Arnett, 2016). For these students, SM aren't just

a medium for connection, but spaces for experimentation with identities, and a form of self-expression. However, such engagement digitally has also raised some concerns on its psychological consequences, including increased social anxiety and loneliness. These two constructs are with significant implications for mental health among young adults navigating academic and social transitions (Zhang et al., 2024).

The American Psychological Association (“APA dictionary of psychology,” 2020) explains social anxiety as a persistent fear of social evaluation, often manifesting as avoidance of interactions that carry the risk of embarrassment or judgment. Loneliness, on the other hand, is an affective state characterised by perceived social isolation, results from a difference between desired and actual social connections (“APA dictionary of psychology,” 2020). While SM offers opportunities to bridge such social gaps, its impact on these psychological states is complex with potential for both relief and worsening distress.

For Malaysian university students, cultural context plays a vital role in forming such experiences. Emerging adulthood’s phase stresses on self-discovery which may clash with collectivist expectations for conformity of the locals. As an example, SM that advocate for mental health awareness may create friction with familial or cultural norms that stigmatise mental illness (Arnett, 2016). Such conflict can worsen one’s social anxiety, particularly when online self expressions prompt familial disapproval.