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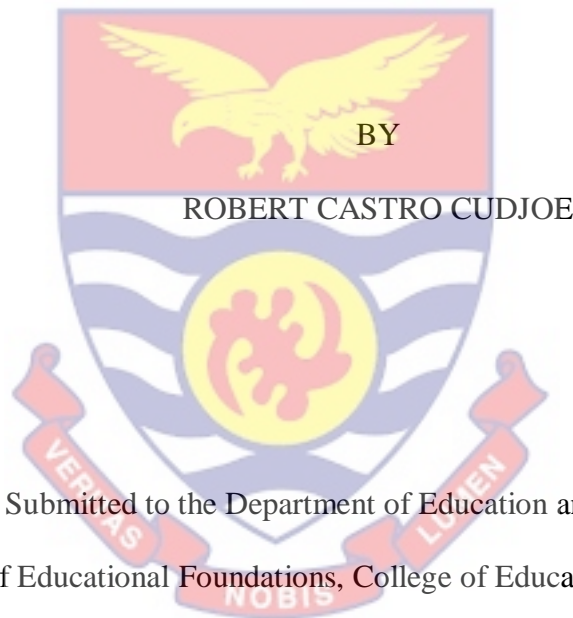
PREDICTORS OF FEAR OF MISSING OUT AMONG UNIVERSITY
STUDENTS IN GHANA



2023

UNIVERSITY OF CAPE COAST

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This Thesis Submitted to the Department of Education and Psychology of the Faculty of Educational Foundations, College of Education Studies, University of Cape Coast, in partial fulfilment of the requirements for the award of Master of Philosophy Degree in Clinical Health Psychology

NOVEMBER 2023

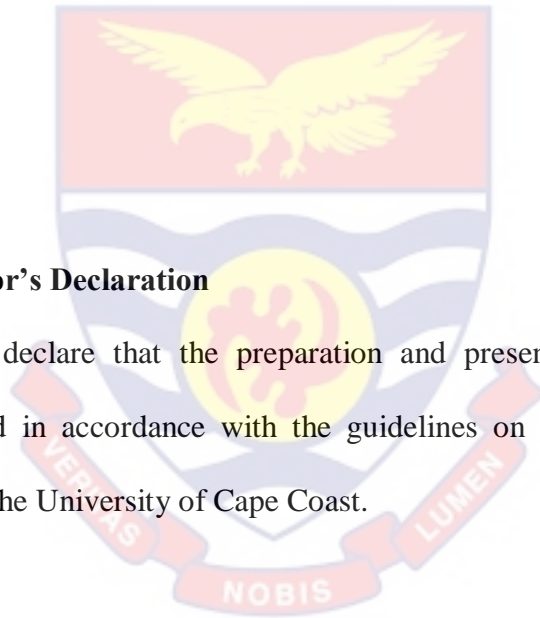
DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

Name:



Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: Date:

Name:

ABSTRACT

Fear of Missing Out (FOMO) is characterized by the anxiety of being left out of social experiences and events, often exacerbated by the ongoing exposure to glorified portrayals of others' lives on social media platforms. It is accompanied by the urge to keep constantly linked with what others are doing through the use of social media. This study investigated the prevalence and predictors of fear of missing out among university students in Ghana. Convenience sampling was used in the cross-sectional descriptive survey to select 442 University of Cape Coast respondents. Four hypotheses and three research questions served as the study's compass. Frequencies and percentages were used to respond to the research questions. Both linear regression and Hayes process macro-moderation analysis were used to test the hypotheses. The study's findings showed that among university students, FOMO was prevalent at moderate (46.2%) and low levels (53.8%). More than half of the students had high self-esteem, and a significant number also had medium and low self-esteem. Most university students were found to have moderately high levels of loneliness. According to the study, among university students, loneliness and self-esteem were significant predictors of FOMO. The association between loneliness and FOMO was not significantly moderated by sex, but the relationship between self-esteem and FOMO was. The study recommended that the National Communications Authority, Ghana Psychology Council and Educational Institutions collaborate in putting measures that regulate the use of social media in place to active mitigate FOMO, as well as building self-esteem in students by creating programs focused on healthy social interactions.

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DEDICATION

To my family and loved ones, especially the ones who made this possible. To my father (Rest in Peace), this is for you.



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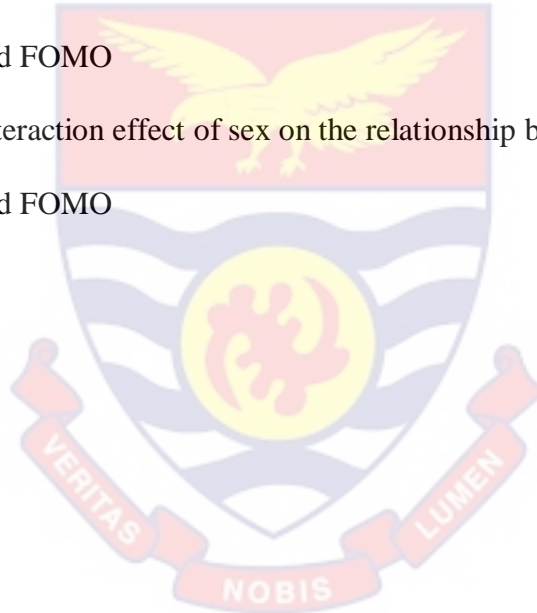
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LIST OF ACRONYMS

FOMO	Fear of Missing Out
SDT	Self Determination Theory
BNT	Basic Needs Theory
NCA	National Communications Authority
GPC	Ghana Psychology Council



CHAPTER ONE

INTRODUCTION

Overview

The introduction positions Fear of Missing Out as an emerging issue among university students in Ghana, driven by increased social media use and the social demands of campus life. It notes the limited local research on the topic and explains why examining predictors such as loneliness and self-esteem is important for understanding its impact. The overview concludes by indicating that the study aims to address this gap and provide insight that can support student wellbeing within Ghanaian universities.

Background to the Study

In the modern era of digital connectivity, the widespread influence of social media networks has changed the social interaction and communication dynamics of young people, especially university students (Kwok & Wescott, 2020). Among the various consequences of this transition, one phenomenon that has received a lot of attention is “fear of missing out” (FOMO). FOMO represents a widespread and growing concern in today's hyper-connected world, affecting individuals across diverse demographic groups. It is particularly relevant and pronounced among university students who have been raised in the era of social media and instant communication (Manca, 2020).

Research on the prevalence of fear of missing out (FOMO) among university students has attracted significant attention in recent years due to the increased use of technology and social media. This growing area of interest is a result of the profound effects that FOMO has on students' emotional, social,

and academic experiences. A number of studies have looked into this particular phenomenon and its consequences (Li et al., 2022).

While FOMO is not a novel concept, its increased prevalence in the context of university life is due to the unparalleled accessibility of social media and digital communication, which allows for continuous and immediate exposure to social events and peer activities (Trottier, 2016). Because of this increased exposure, as well as the human need for approval and social connection, FOMO has become a common emotional condition among university students.

Fear of social rejection and the need to stay in touch with friends and their activities are closely linked to FOMO (Liu et al., 2022). University students' propensity for FOMO is both a reflection of and a response to the evolving nature of social interaction, as they are often among the first to adopt new platforms and technological advancements.

The word FOMO was first introduced in 2004 and has gained widespread usage since 2010 to describe a phenomenon observed on social media platforms (Morford, 2021). 2013 saw the definition of FOMO by British academics as "pervasive fear that others may be getting rewarding experiences from which one is absent." It is marked by the need to utilise social media to stay continuously connected to what other people are doing (Przybylski et al., 2013).

People are more exposed to what other people are doing than ever before as a result of technology advancements, and they also constantly question if they are making enough progress or if their lives are at the right place (Rifkin et al., 2015). The two components of FOMO are the sense of

missing out and the compulsive behaviour to maintain these social connections. Relatedness, which has to do with the need to fit in and form enduring interpersonal bonds, can be used to characterise the social component of FOMO (D'Lima & Higgins, 2021).

FOMO is the unpleasant and frequently overwhelming sensation that one is missing out on important or desirable events because friends or other people are having them. It has been linked to low levels of mood and life satisfaction (Fox & Moreland, 2015), and it is characterised by a need to maintain social ties. It may present as a form of social anxiety (Hetz et al., 2015). Although FOMO has been widely covered by the media for a while, researchers have just recently started looking into the negative effects of FOMO that social media users face (Alt, 2015). According to Cham et al. (2019), FOMO is a prevalent form of problematic social media attachment that is linked to a number of unpleasant life experiences and sensations, such as anxiety, poor sleep, diminished life competency, emotional strain, detrimental effects on physical well-being, and a lack of emotional control.

A person's apprehension about missing out on socially and personally fulfilling events that others might enjoy (Tandon et al., 2021), is marked by a desire to keep up with what other people are doing (Przybylski et al., 2013). As Mazlum and Atalay (2022) point out, the desire to be involved in fulfilling experiences and maintain social connections is a basic human need that exists from infancy and is not exclusive to social media use. However, with social media readily accessible through mobile devices, there are many more opportunities to stay in connection with friends, share content, and have fulfilling experiences (Fuster et al., 2017). Studies have shown that

problematic smartphone use (Elhai et al., 2016; Göksun, 2019) and nomophobia which is the fear of losing mobile phone connection (Gezgin et al., 2018), are linked to FOMO. When a person is experiencing FOMO, the use of smart phone becomes more and this becomes a problem for the individual since they cannot go about their daily activities without having their smart phones with them.

Although FOMO is not exclusive to social media users, those who suffer from may feel pressured to check social media more frequently in order to keep up with their friends' plans and activities. On the other side, excessive usage of social media might exacerbate or cause existing inadequacy because of the user's heightened awareness of the many opportunities for interactions (Fuster et al., 2017).

Many people who use social media worry that they do not have as much enjoyment in their life as other people. They may feel worse about themselves and be unsatisfied (Calancie et al., 2017). Burton (2014) concentrated on emotions such as "Why do I never attend to parties while other people do? "Why am I literally spilling water on myself at home while everyone else is looking amazing at some event?" Social media platforms like Facebook, Instagram, and Twitter provide constant frameworks through which one can view content, making social comparison more profound given others' polished presentations and sociality. This is described by Zheng et al. (2020) as a sign of status anxiety.

In today's world, FOMO has grown progressively more prevalent, especially among university students who constantly are bombarded with social media updates and peer pressure (Liu et al., 2022). As of 2021, there

were approximately 4.9 billion internet users worldwide, which is around 63% of the global population, with a quarter of these internet users being affected by FOMO (Statista, 2021).

Ghana's social media use as of 2022 was 8.8 million which was equivalent to 27.4% of the total population, compared to 8.2 million which was equivalent to 26.1% of the population by 2021 (DataReportal, 2022). The analysis revealed that social media users in Ghana increased by 600 thousand, which is 1.3% between 2021 and 2022. These statistics show the margin of people who are active social media users and the probability of these users experiencing higher levels of FOMO.

According to a US study by Rifkin et al. (2015) involving 198 college students, it was revealed that FOMO was more common among social media users who use it frequently, and it happens more frequently in social contexts with friends (84.4%) as opposed to family members (48.3%) or co-workers (53.7%).

According to earlier studies on FOMO, feelings of boredom, loneliness, irritation, and inadequacy are strongly correlated positively with unsettling social and emotional experiences (Abel et al., 2016; Edwards, 2017; Lampe et al., 2007). According to some additional studies, FOMO has a negative correlation with positive characteristics as general well-being, fulfilment, and life satisfaction (Burke et al., 2010; Przybylski et al., 2013; Wortham, 2011).

Research has indicated that FOMO may be brought on by low self-esteem (Uram & Skalski, 2022). Individuals who have poor self-esteem could worry missing out on opportunities that could boost their sense of worth

because they believe they are unworthy of socialising or engaging in activities (Lund et al., 2019). They may believe they are not attractive or fascinating enough to be invited to social gatherings or activities. They may feel left out and alienated as a result, which will only serve to reinforce their poor self-esteem. Conversely, people who have a high sense of esteem are more likely to feel confident in their own skills and morals, which lessens the negative effects of FOMO on their emotional health (Lee, 2020). They are less inclined to feel as though they are missing out on experiences and to compare themselves to others. Rather, they concentrate on their personal objectives and desires, which provides them with a feeling of fulfilment and purpose.

According to research, there may exist disparities between sex in self-esteem and how it affects FOMO. Research has indicated that although there is a slight difference, males tend to have stronger self-esteem than females (Bleidorn et al., 2016; Zeigler-Hill et al., 2015). According to some researchers, socialization and cultural norms which emphasize characteristics that are typically associated with males, such confidence and assertiveness, may be the cause of this sex disparity (Street & Dardis, 2018). However, females may be more likely to dwell on their flaws and be more critical of themselves as a result of socialization, which would diminish their self-esteem.

Studies have indicated that FOMO is more common in females than in males (Rozgonjuk et al., 2020). According to Åberg, Koivula, and Kukkonen (2020), females may feel inadequate and excluded when they believe they are missing out on social events or experiences, which could be caused by societal expectations to adhere to specific beauty standards and social norms. There

may be differences in the correlation between FOMO and self-esteem among males and females. For instance, Servidio (2023) showed that higher self-esteem in males was associated with a higher likelihood of experiencing FOMO, whereas higher self-esteem in females was associated with a lower likelihood of experiencing it. The researcher hypothesized that this may be the case because high self-esteem females may be more confident in their own abilities and values, lessening the negative emotional effects of FOMO, while high-self-esteem males may have a greater sense of entitlement and a fear of missing out on opportunities that could validate their status.

Additionally, studies have revealed that females typically feel more alone than males do, especially when it comes to emotional loneliness (Maes et al., 2019). The absence of close, personal interactions with others is the sensation of emotional loneliness (Adamczyk, 2016). Conversely, it is possible that males are more likely to experience social loneliness, which is the perception of having an insufficient number of social ties or contacts (Chan, 2015). Studies on FOMO have revealed that females may be more prone to it than men (Hunt et al., 2018). This may be because females are often more socially conscious and value relationships and social connections more than males do. In view of this, females could be more prone to worry or suffer anxiety related to missing out on social activities or opportunities.

According to a 2012 survey, FOMO affected more than 56% of the population, with young people having a significantly greater prevalence. The majority of the research that followed focused on this age group rather than other demographic groups that might be less affected by pressure from society. It came to a different conclusion. The significant number of text messages and

updated emails that accumulate if a person with FOMO does not check their social media accounts can occasionally be too much for them to handle (Skierkowski & Wood, 2012; Bernicot et al., 2012).

Statement of the Problem

From the preceding arguments, it is clear that FOMO is a psychological issue that has to be appropriately addressed because it leads to social and physical issues. According to Lin et al. (2021), FOMO can have a variety of negative repercussions on mental health, such as anxiety, depression, and a lower quality of life.

Research indicates that FOMO victims are more prone to experience stress, anxiety, and life dissatisfaction (Tanhan et al., 2022). This can cause self-destructive behaviours like substance misuse and high-risk sexual behaviours, as well as negative cognitive patterns including thoughts of worthlessness or hopelessness.

A quarter of all internet users worldwide have FOMO, which is a developing concern (O'Connell, 2020). From 2018 to the present, the percentage of persons who spend more than 10 hours a day online has risen from 2.8% to 5.4% (Elhai et al., 2021). According to a meta-analysis of research on the subject, FOMO is becoming increasingly prevalent, particularly in university students (Milyavskaya et al., 2018; Rogers & Barber, 2019; Al-Furaih & Al-Awidi, 2021; Hayran & Anik, 2021).

For university students in Ghana, who are becoming more and more accustomed to living in a technologically advanced environment (Qua-Enoo et al., 2021), FOMO may have a serious negative impact on their mental well-being, scholastic achievement, and overall college experience. Studies show

internet addiction among university students being prevalent with statistics revealing 13.1% problematic (addictive) and 73.1% classified as over-users (Mahama et al., 2024). Social media addiction was 80% for mild/moderate and 1% for severe (Otu, 2015). It is critical to investigate into the frequency and determinants of FOMO in this particular group in order to tackle this growing concern.

Most studies conducted on FOMO can be found in the USA (Hetz, et al., 2015; Hodkinson, 2019; Debb et al., 2022), Europe (Aygul & Akbay, 2019; Popovac & Hadlington, 2020), Asia (Chang & Chen, 2019; Lee et al., 2020; Kim & Lee, 2021; Koo & Kwon, 2019) and some parts of Africa, specifically South Africa, Nigeria, Zambia and Egypt (Jood, 2017; Omodior, 2021; Mambwe, 2018; Awad et al., 2020).

Self-esteem and loneliness are recognized as significant predictors of FOMO (Uram & Skalski, 2022). When it comes to FOMO, self-esteem which represents one's sense of value and acceptance of oneself, can either be a risk factor or a protective factor (Eromo & Levy, 2017). In a manner comparable, FOMO can be triggered by loneliness, a subjective feeling of social isolation, as people try to connect online to decrease their loneliness (Adams, 2016). It is essential to investigate how loneliness and low self-esteem impact FOMO among Ghanaian university students in order to create interventions that are both culturally appropriate and efficacious.

Researchers in Ghana have studied the relationship between internet addiction and social media use, finding links to depression, risk-taking behaviours, academic performance, and reduced psychological well-being (Kyei & Nsiah, 2019; Gyasi & Aikins, 2021). Various studies have explored

the correlation between social media addiction and academic performance, self-esteem, and overall mental health (Boateng, 2018; Adu-Gyamfi et al., 2019; Adjei & Armah, 2021).

Many people experience FOMO, which is the fear of missing out on social events and experiences. This fear is often worsened by the constant exposure to idealized portrayals of others' lives on social media platforms, as stated by Morford in 2021. University students in Ghana are no exception to this trend, as they are heavily involved in social media and digital communication, just like their global peers. The extent and factors contributing to the prevalence of FOMO among students in Ghanaian universities have not been thoroughly explored. It is crucial to understand the intensity of these feelings to create targeted interventions and support mechanisms. This study aims to bridge the gaps in existing research and shed light on the ecological and literature aspects of this issue.

Purpose of the Study

The main purpose of this study was to investigate the prevalence and predictors (self-esteem and loneliness) of FOMO among university students. The study also assessed the moderating role of sex in the relationship between FOMO and its predictors.

Research Objectives

Specifically, this study seeks to:

1. Investigate the prevalence of FOMO among university students.
2. Investigate the level of self-esteem among university students.
3. Investigate the level of loneliness among university students.

4. Ascertain whether self-esteem predicts FOMO among university students.
5. Ascertain whether loneliness predicts FOMO among university students.
6. Assess the moderating role of sex in the relationship between self-esteem and FOMO among university students.
7. Assess the moderating role of sex in the relationship between loneliness and FOMO among university students.

Research question

The following research questions guided the study:

1. What is the prevalence of fear of missing out (FOMO) among university students?
2. What is the level of self-esteem among university students?
3. What is the level of loneliness among university students?

Research Hypotheses

- 1 H_0 : Self-esteem does not significantly predict FOMO among university students.
 H_1 : Self-esteem significantly predicts FOMO among university students.
- 2 H_0 : Loneliness does not significantly predict FOMO among university students.
 H_1 : Loneliness significantly predicts FOMO among university students.
- 3 H_0 : Sex does not significantly moderate the relationship between self-esteem and FOMO among university students.

H₁: Sex significantly moderates the relationship between self-esteem and FOMO among university students.

4 H₀: Sex does not significantly moderate the relationship between loneliness and FOMO among university students.

H₁: Sex significantly moderates the relationship between loneliness and FOMO among university students.

Significance of the Study

Findings will help the National Communication Authority (NCA) guide policy formulation and implementations with regards to network providers' regulations on limiting social media use.

Also, it will inform guidance and counselling units in universities on seminars and interventions to help desensitize students on FOMO.

It is imperative that results from this study are communicated to the clinical community to help with creating more awareness about the condition. Results from this research will be valuable to stakeholders such as Ghana Psychology Council in the comprehensive awareness and treatment of FOMO.

The findings from this study will broaden our knowledge and understanding of fear of missing out (FOMO). It will add up to the already existing body of literature on FOMO and help in bridging the literature gap. This study will also enable us to identify the relationship between fear of missing out (FOMO) and its predictors.

Delimitation to the Study

In terms of geographical area, this study focused on university students in Ghana, specifically students at the University of Cape Coast (UCC) in the

central region of Ghana. The study also focused on the prevalence and predictors (self-esteem and loneliness) of FOMO among university students. The relationship between FOMO and predictors being moderated by sex.

Also, this study used regular undergraduate students in UCC. Any other level of education did not meet the criteria for selection. Data collection employed google forms in the distribution of research questionnaires. WhatsApp was the medium for distribution to ensure respondents were social media users.

Limitations

The primary constraint of the research was the utilization of Google Forms to gather data from the intended respondents. Getting students to respond to the questionnaire online was a hassle since most of them would ignore opening the link as soon as they see the message. To mitigate this limitation, respondents were contacted personally, and made sure they understood the goal of the study in order to get their responses.

Given the novelty of the phenomenon of FOMO in Ghana, A more thorough investigation using a qualitative research approach, or even better, a mixed method, would have revealed the unique experiences associated with FOMO and the psychological demands it places on people. This is because the condition is experiential in nature and each person battling it has unique experiences. Therefore, in order to improve a more vivid understanding of the issues, future research should take a mixed method approach.

Definition of Terms

Fear of Missing Out (FOMO): FOMO is characterized by the anxiety of being left out of social experiences and events, often exacerbated by the

ongoing exposure to glorified portrayals of others' lives on social media platforms. It is accompanied by a constant need to use social media to stay connected to what other people are doing.

Self-Esteem: Self-esteem is the degree to which an individual feels good about themselves and how they assess their own thoughts and feelings in general.

Loneliness: It is characterized as a troubling sensation that goes along with the belief that one's social needs are not being satisfied by the number or, more importantly, the quality of one's social relationships.

Organisation of the Study

There are five (5) chapters in the study. The background of the study, the statement of the problem, the purpose of the study, the research objectives, the questions and hypotheses, the significance of the study, the delimitations and limitations of the study, and the definition of terms are all included in the first (1) chapter of the introduction. Chapter two (2) covers literature on the theories that underpins this study, the concepts used and a conceptual framework showing how the various concepts of variables interact with each other, and how other studies are related to the stated hypothesis. Methodology, which includes the research design, study area, population, and sampling procedure, was covered in Chapter three (3). This chapter also covered data collection instruments, data collection procedure, and data processing and analysis. The results and discussion are presented in chapter four (4). Chapter five (5) discussed the summary of the research findings, conclusions, and recommendations.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The study's theoretical and conceptual framework components are covered in this chapter. It explains how to interpret the major ideas and theories that form the basis of the study and examines them in relation to it. Thus, the goal of this chapter is to provide an overview of the literature on the subjects of loneliness, self-esteem, and FOMO. A review of the empirical research literature that demonstrates the connections between these ideas would also be included. The theoretical review specifically aims to examine:

- Basic Needs Theory (Ryan & Deci, 2000)
- Rosenberg's self-esteem theory (Rosenberg, 1965)
- Theory of loneliness (Weiss, 1973)

Conceptual review will take into account:

- The concept of FOMO
- The concept of self-esteem
- Loneliness

The empirical review examined pertinent research that was done on:

- The prevalence of FOMO among university students
- Self-esteem and loneliness as predictors of FOMO
- The role of sex in FOMO studies

Theoretical Framework

According to Ambron (1981), a theory is a collection of assumptions or beliefs that aim to explain a natural phenomenon. Theories define and rationalise the cause and effect relationship between key variables. In this study, we will review the theories that form the foundation of our research.

Basic needs theory (Ryan & Deci, 2000)

Self-determination theory (SDT) is a theory of human motivation and personality that focuses on individuals' psychological needs and intrinsic tendencies, particularly in the absence of external distractions or influences. SDT is described as having six (6) mini theories, namely: cognitive evaluation theory (CET), organismic integration theory (OIT), causality orientations theory (COT), basic needs theory (BNT), goal contents theory (GCT), and relationship motivation theory (RMT). For the purpose of this study, the basic needs theory was used to better underpin FOMO.

BNT is a psychological theory that elucidates how individuals' motivation and behaviour are impacted by their fundamental psychological needs. According to BNT, humans possess three elementary needs that are imperative to be fulfilled, in order to cultivate and uphold intrinsic motivation and well-being. These needs are autonomy, competence, and relatedness (Ryan & Deci, 2000).

Autonomy is the feeling of having control and choice over one's behaviour and environment. When people feel autonomous, they tend to engage in activities that they find inherently interesting and enjoyable, which leads to a greater sense of satisfaction. This concept has been extensively studied by Ryan et al. (2015). Feeling competent is crucial to being effective

in one's environment and interactions, according to Ryan & Moller (2017). When individuals feel capable, they are more inclined to participate in activities that challenge them, which can help them improve their skills and knowledge.

Relatedness is the feeling of being connected to others and being part of a social group. When people experience a sense of relatedness, they tend to participate in activities that help build social connections and relationships (Deci & Ryan, 2000).

BNT states that when our basic needs are fulfilled, we tend to develop intrinsic motivation, which is the drive to engage in an activity for the sake of enjoying it, rather than for external rewards or pressure. Intrinsic motivation is linked to positive outcomes such as creativity, learning, and overall well-being. Engaging in activities for intrinsic reasons leads to increased psychological growth and self-esteem due to autonomy, competence, and relatedness (Ryan & Deci, 2017). In the field of SDT, the focus is on how external forces impact people's intrinsic motives and needs (Ryan & Deci, 2017). Extrinsic motivation, which is driven by external factors like money, recognition, and fame, is widespread among people.

BNT places significant emphasis on intrinsic motivation, which is the internal drive to succeed. This drive is often fueled by the desire to gain independence and prove oneself. According to Steg et al. (2016), if the behaviour is solely self-determined, there is a high chance that it will be intrinsically motivated and not driven by external factors such as rewards or prizes. Instead, the behaviour is performed for self-satisfaction, interest, and enjoyment of the activity itself. Non-self-determined behaviours are those that

are done solely out of necessity rather than enjoyment or personal fulfillment. These actions are undertaken because the individual has little or no choice in the matter and must do them whether they want to or not. As a result, the individual has little control over these behaviours since they are not done willingly.

One of the key principles of BNT is the differentiation between intrinsic and extrinsic motivation. BNT argues that intrinsic motivation is more effective in promoting long-term behavioural change and well-being compared to extrinsic motivation (Ryan & Deci, 2017).

BNT has found application in various domains such as education, work, sports, and health. For instance, in the realm of education, BNT proposes that students exhibit greater intrinsic motivation to learn when their autonomy, competence, and relatedness needs are fulfilled (Goldman et al., 2017).

How basic needs theory underpins FOMO

FOMO was conceptualized using BNT under the framework of SDT. This approach was developed by Ryan et al. (2000) and later applied by Przybylski et al. (2013) to better understand the underlying motivations behind FOMO. According to BNT, FOMO can be interpreted as a manifestation of the fundamental psychological need for relatedness, as proposed by Ryan and Deci (2000). When individuals do not feel their need for relatedness is satisfied, they may feel socially isolated or excluded, leading to anxiety or distress.

FOMO is a response to the sense of social disconnection that people feel. In an attempt to maintain social connections, individuals participate in

events or activities that are perceived as socially desirable or popular. However, it is essential to note that FOMO can also be driven by extrinsic motivations, such as the desire for social status or recognition, which do not align with the principles of BNT. Extrinsic motivations can lead individuals to focus on external rewards or pressure, rather than on intrinsic satisfaction and well-being, which can undermine the development of intrinsic motivation (Ryan & Deci, 2000).

Overall, BNT suggests that FOMO can be explained as a response to the fundamental need for social connection. However, BNT also emphasizes the importance of nurturing intrinsic motivation and well-being instead of relying on external rewards or pressure to maintain social connections. This approach helps in preventing feelings of social disconnection or anxiety.

Rosenberg's self-esteem theory (Rosenberg, 1965)

Self-esteem, as defined by Rosenberg (1965a), refers to an individual's positive or negative attitude towards oneself and their evaluation of their own thoughts and feelings. It is considered as a personal psychological trait that relates to self-judgment, based on one's values and beliefs about oneself (Alesi et al., 2012). This implies that an individual is aware of their value system and has an emotional understanding of their self-worth.

As per the theory, an individual's self-esteem is influenced by how well their self-concept aligns with their ideal self. The self-concept refers to their beliefs and perceptions about themselves, while their ideal self is the person they aspire to be. According to Rosenberg (1965), people with high self-esteem perceive a high degree of congruence between their self-concept

and ideal self. On the other hand, people with low self-esteem perceive a lower degree of congruence between the two.

Self-esteem is affected by social comparison, which is the act of evaluating oneself in relation to others. People who perceive themselves as superior to others in areas that matter to them are more likely to have high self-esteem. Conversely, individuals who perceive themselves as inferior to others are more likely to have low self-esteem. This concept was first introduced by Rosenberg in 1965.

According to Rosenberg's theory, self-esteem is a dynamic construct that can fluctuate over time and is influenced by various factors, such as social experiences, cultural values, and personality traits. For instance, individuals who receive positive feedback and support from others are more likely to develop high self-esteem, whereas those who encounter rejection or criticism are more likely to have low self-esteem. Similarly, individuals who internalize cultural values that emphasize individual achievement and success are more likely to have high self-esteem, while those who internalize values that emphasize collective identity and social responsibility may have lower self-esteem (Rosenberg, 1965).

Rosenberg's Self-Esteem Theory has a significant strength in its recognition of the dynamic nature of self-esteem and the influence of social experiences on its development. However, some critics argue that the theory places excessive focus on internal processes of an individual and fails to fully acknowledge the impact of external factors, such as social inequality and discrimination, on shaping self-esteem (Crocker & Park, 2004).

Overall, Rosenberg's theory on self-esteem provides a valuable framework for understanding the development and maintenance of positive self-regard. This, in turn, has important implications for promoting well-being and personal growth.

How Rosenberg's self-esteem theory underpins FOMO

According to Rosenberg's self-esteem theory, individuals with low self-esteem are more likely to experience FOMO. When they see their peers having fun or engaging in exciting activities, they may feel inadequate or doubtful about themselves. They may worry that they are missing out on something important or less valued and appreciated than their peers.

Having high self-esteem is an indication of good social adjustment (Martínez et al., 2021). Both individuals with high and low self-esteem may respond positively to constructive feedback, but they might have different reactions to negative feedback. People with low self-esteem are more likely to have negative reactions, whereas people with high self-esteem tend to be less affected and may disregard or limit the impact of negative feedback (Jordan & Zeigler-Hill, 2020).

Furthermore, people with low self-esteem tend to engage more in social comparison, which is a key factor that contributes to FOMO. Social comparison involves evaluating oneself in relation to others, and it can lead to feelings of envy, jealousy, or low self-worth (Lee, 2020). Individuals who engage in social comparison are more likely to experience FOMO because they are constantly comparing themselves to others and feeling like they are missing out on something others have.

Low self-esteem can have a significant impact on an individual's social adjustment and overall quality of life. It can lead to social maladjustment, creating a vicious cycle that negatively affects one's psychological health and well-being. According to Vallis (2016), the relationship between low self-esteem and social adjustment is critical because it can eventually result in social maladjustment. Also, Sarkova et al. (2014) emphasize the importance of self-esteem in personal well-being, as it has a positive correlation with psychological health, social adjustment, and overall quality of life.

Having a positive self-esteem has a strong correlation with body image and serves as a standard to verify the accuracy of other measurements, according to Alesi and Pepi (2016). This means that self-esteem plays a crucial role in both personal and social aspects of life, especially in a society where people are constantly in contact with others.

In summary, Rosenberg's self-esteem theory suggests that individuals with low self-esteem may experience FOMO due to heightened feelings of insecurity, social comparison, and inadequacy.

Theory of Loneliness (Weiss, 1973)

Loneliness is a subjective feeling that arises from a perceived gap between one's desired and actual levels of social connection, according to Weiss's theory of loneliness (1973). As per Weiss, loneliness is not just a result of objective social isolation, but rather a consequence of an individual's subjective evaluation of their social relationships.

Weiss's theory suggests that people who perceive a difference between the level of social connection they want and the level they actually have are more likely to feel lonely. This difference can arise from various factors such

as changes in social situations, like moving to a new city or going through a break-up, or internal factors like low self-esteem or social anxiety (Weiss, 1973).

Weiss, in his research, has highlighted the negative impact of loneliness on individuals. This includes an increased risk of depression, anxiety, and other mental health problems, as well as a decline in physical health and well-being (Weiss, 1973). These findings are supported by a significant amount of research that consistently associates loneliness with a range of negative health outcomes (Hawkley & Cacioppo, 2010).

Weiss's theory is commendable for recognizing the subjectivity of loneliness and highlighting the significance of individual perspectives on social connections. This has crucial implications for comprehending and combating loneliness, indicating that interventions must be personalized to cater to individual requirements and situations (Weiss, 1973).

To sum it up, according to Weiss's theory of loneliness, feeling lonely happens when someone perceives a difference between their desired and actual levels of social connection. This theory emphasizes the significance of personal views on social connection and has crucial implications for recognizing and dealing with loneliness, as well as its negative impact.

How the theory of loneliness underpins FOMO

FOMO is a feeling of anxiety or uneasiness that arises when we perceive that others are having more fun or experiencing more exciting things than we are (Przybylski et al., 2013). This can lead to feelings of inadequacy, self-doubt, and a sense of missing out on something significant. Similarly, individuals who experience loneliness may also feel like they are missing out

on social connections and experiences, which can contribute to feelings of sadness and isolation.

Additionally, FOMO can be regarded as a type of social comparison. Social comparison is the process of judging oneself in relation to others, which can trigger emotions like envy, jealousy, or low self-esteem. Consequently, people who frequently engage in social comparison may be more prone to experiencing FOMO.

Weiss's theory of loneliness provides a foundation for understanding FOMO. According to the theory, both loneliness and FOMO stem from a perceived difference between one's desired and actual levels of social connectedness (Weiss, 1973). This discrepancy can trigger negative emotions such as anxiety, low self-esteem, and depression. Moreover, FOMO can also be viewed as a type of social comparison, which is a crucial element in Weiss's theory of loneliness.

Conceptual Review

The following will be the focal points of the conceptual review:

The Concept of FOMO

Fear of missing out, commonly known as FOMO, is the sense of worry or unease that you may be missing out on something, be it information, events, experiences, or decisions that could potentially improve your life (Przybylski et al., 2013). FOMO is often linked to a fear of regret (Wortham, 2011), which can lead to concerns about missing out on an opportunity for social interaction, a new experience, a memorable event, or a profitable investment (Arya, 2021). Essentially, FOMO is characterized by a desire to stay connected with what others are doing (Przybylski et al., 2013), and can be

described as the fear that deciding not to participate may be the wrong choice (Wortham, 2011; Alt & Boniel-Nissim, 2018).

Experiencing FOMO can occur when one misses out on a conversation, a TV show, a wedding, or a party. Hearing about others discovering a new restaurant could also trigger FOMO (Van Solt, 2019). In recent years, FOMO has been linked to various negative psychological and behavioural symptoms (Wortham, 2011; Elhai et al., 2016; Gupta & Sharma, 2021).

In recent times, FOMO has increased due to advancements in technology (Schreckinger, 2014). Social networking sites offer numerous opportunities for social engagement, but they also create an endless stream of activities in which a person is not involved, leading to FOMO (Przybylski et al., 2013). Furthermore, excessive use of social media can lead to psychological dependence, FOMO, and even pathological internet use (Song et al., 2004; Chou et al., 2005). FOMO is associated with worsening depression and anxiety, and can lead to a lower quality of life (Elhai et al., 2020).

FOMO is not limited to individuals alone. It can also impact businesses. Sometimes, business leaders invest in certain trends or hype just because they perceive others are doing the same, even if it doesn't align with their business strategy (Lipovkina & Khanevskaya, 2022). This tendency is known as the bandwagon effect. Essentially, it means that when one person sees others doing something, they assume it must be important and worth doing, even if they do not really understand its significance or agree with it.

They want to participate simply because they do not want to feel left out (Gupta, 2021).

The term FOMO was discovered by marketing strategist Dr. Dan Herman in 1996. He conducted research for Adam Bellouch and published the first academic paper on the topic in 2000 in *The Journal of Brand Management* (Herman, 2000). According to Herman, with the rise of mobile phone usage, texting, and social media, the concept of FOMO has become more widespread and has helped in popularizing the term among the masses (Schreckinger, 2014).

Patrick J. McGinnis is credited with coining the term FOMO. He popularized it through an op-ed he wrote in "The Harbus" in 2004, which is the official magazine of Harvard Business School. The article was titled "McGinnis' Two FOs: Social Theory at HBS". In addition to FOMO, the article also discussed another similar condition called Fear of a Better Option (FOBO) and their impact on the school's social life. Various sources including McBride (2021), Schreckinger (2014), and Blair (2017) have referred to this article and its contribution to social theory.

FOMO is a term that has gained popularity in recent years. Its origin can be traced back to a 2004 article in the Harbus by academic Reagle. Nowadays, people use FOMO as a hashtag on social media, and it has been mentioned in numerous news articles - both online, like Salon, and in print, like The New York Times (Schreckinger, 2014).

Psychological

Research has found that FOMO is related to a lack of fulfillment of basic psychological needs (Przybylski et al., 2013). According to self-determination theory, human beings have three basic psychological needs: competence, autonomy, and relatedness, and when these needs are not met, it can lead to lower levels of psychological satisfaction. A study showed that participants who reported lower levels of fulfillment of these basic psychological needs also experienced a higher level of FOMO. Moreover, FOMO has been associated with negative psychological effects, such as a decrease in overall mood and life satisfaction (Wortham, 2011).

According to a study conducted on college campuses, feeling FOMO can cause higher fatigue on the day when that feeling is experienced (Milyavskaya et al., 2018). Moreover, continuously experiencing FOMO throughout the semester can also increase stress levels among students (Milyavskaya et al., 2018). Additionally, individuals who expect to experience FOMO can develop lower levels of self-esteem (Gupta, 2021). This research indicates that university students in Ghana may experience higher fatigue due to FOMO and may also be at risk of developing low self-esteem if they are constantly expecting to experience FOMO.

According to a study conducted by J. Walter Thompson (JWT) Intelligence, FOMO, or the Fear of Missing Out, can have an impact on how we perceive ourselves and our long-term goals (Reer et al., 2019). The study found that almost half of the participants felt overwhelmed by the amount of information they needed to keep up with, and they believed it was impossible not to miss out on anything. This feeling of relative deprivation can lead to FOMO and dissatisfaction, which can negatively affect our psychological

well-being (Morford, 2010; Przybylski et al., 2013; Elhai et al., 2020). FOMO can cause negative social and emotional experiences, such as boredom and loneliness (Burke et al., 2010).

According to a 2013 study, FOMO can have a negative impact on an individual's mood and overall life satisfaction (Przybylski et al., 2013). It can also lead to a decrease in self-esteem, affect mindfulness, and cause anxiety (Vitelli, 2016). The study found that four out of ten young people reported experiencing FOMO occasionally or frequently (Hodkinson, 2019). Additionally, the study found that FOMO is more common among males than females, and is negatively correlated with age, which means that as an individual grows older, their tendency to experience FOMO decreases (Przybylski et al., 2013). The findings of this study shed light on the relationship between FOMO and other related variables, emphasizing the importance of understanding and managing this phenomenon.

Behavioural

The fear of missing out stems from a feeling of missing social connections or information (Elhai et al., 2016). This absent feeling is then followed by a need or drive to interact socially to boost connections (Elhai et al., 2016; Gupta & Sharma, 2021). The fear of missing out not only leads to negative psychological effects but also has been shown to increase negative behavioural patterns (Elhai et al., 2016). With the aim of maintaining social connections, negative habits are formed or heightened (Milyavskaya et al., 2018).

A study conducted in 2019 surveyed 467 teenagers and revealed that they felt societal pressure to always be available (Dolan, 2023). Further

research suggests that the fear of missing out, or FOMO, may lead to a constant search for new connections, often at the cost of abandoning current ones (Woods & Scott, 2016). This fear, which arises from digital connections, has been positively correlated with bad technology habits, especially among young people (Grohol, 2011). These negative habits include increased screen time, checking social media during school, or using the phone while driving (Grohol, 2011; Przybylski et al., 2013). Social media use in the presence of others is now commonly referred to as phubbing (Grohol, 2011).

Several studies have found a negative correlation between the amount of sleep and the level of FOMO that individuals experience (Milyavskaya et al., 2018; Gupta & Sharma, 2021). Lack of sleep among college students who experience FOMO can be attributed to the numerous social interactions that take place on campuses late at night (Milyavskaya et al., 2018). Furthermore, another study has shown that FOMO can lead college students to make poor decisions with regard to alcohol, such as underage drinking and binge drinking (Wolburg, 2022).

The Concept of Self-Esteem

Self-esteem is a crucial aspect of human psychology that refers to an individual's evaluation and perception of their own worth and value (Kumar, 2017). It plays a vital role in shaping our thoughts, emotions, and behaviours, and affects how we perceive ourselves, interact with others, and navigate through various life situations (Fox & Magnus, 2014).

Self-esteem is a complex concept that consists of both cognitive and emotional components (Eromo & Levy, 2017). The cognitive component relates to the beliefs and thoughts that we hold about ourselves, whereas the

emotional component is concerned with the feelings and emotions that we experience in relation to our self-perception (Kamalinasab & Mohammadkhani, 2018). It's important to note that both elements are interconnected and can influence each other. Overall, self-esteem can be classified into two main types: high self-esteem and low self-esteem.

High self-esteem

Individuals with high self-esteem possess a positive self-image and a balanced self-appraisal (Samphirao, 2016). They are satisfied with their physical appearance, personality and overall identity. Their self-image is consistent with their accomplishments, strengths, and positive qualities. When individuals have a positive self-image, they are more likely to engage in healthy, supportive and respectful relationships (Mbuva, 2016). They tend to attract and maintain positive social connections. They acknowledge their strengths, abilities and positive qualities. They are comfortable with themselves, and they are less likely to engage in harsh self-criticism or self-doubt.

Based on the findings of Srewal et al. (2023), individuals who possess high self-esteem generally display more confidence and self-assurance in their abilities and decision-making. Such people have a firm belief in their potential to deal with challenges and surmount obstacles, which ultimately leads to an increased sense of mastery and resilience.

Having high self-esteem can play a significant role in building emotional resilience (Arslan, 2016). People who possess such positive self-image are better equipped to handle stress, cope with setbacks, and rebound

from adversity. They maintain a positive outlook and exhibit emotional maturity in the face of life's ups and downs (Martínez-Martí & Ruch, 2017).

Achieving high self-esteem is strongly linked to the quality of interpersonal relationships (Erol & Orth, 2017). High self-esteem has a positive impact on many different areas of life, including education, career, and personal endeavours (Orth & Robins, 2022). People with high self-esteem are often more motivated, focused, and goal-oriented, which can lead to better performance and achievement (Ozrudi & Matmask, 2019).

Donald et al. (2018) claimed that people who have high self-esteem value themselves and show self-compassion. They show kindness to themselves and forgiveness for their own transgressions. They are also less prone to self-destructive behaviours and less critical of themselves. Positivity toward oneself is fostered by high self-esteem (Huprich et al., 2016). These people feel good about themselves and are confident in their abilities. They believe that they are worthy of happiness, respect, and love.

Cichocka et al. (2019) noted in a study that having a high sense of self-worth is based on self-awareness and reality rather than conceit or narcissism. People who have a high sense of their own worth are receptive to personal development and acknowledge that, like everyone else, they can always do better (Cramer et al., 2016). It's crucial to remember that developing and sustaining a strong sense of self-worth takes time. Self-acceptance, self-affirmation, and self-care techniques are all part of this process (Pandey et al., 2020). Establishing and fulfilling personal objectives, asking for help and criticism, and practicing self-reflection are all ways to boost one's self-esteem.

In summary, having a positive self-perception, self-assurance, emotional stability, wholesome relationships, success, and self-compassion are traits associated with high self-esteem. It is an important psychological tool that enhances a person's general wellbeing and ability to face obstacles head-on with a positive, empowered attitude.

Low self-esteem

People who are low on self-esteem frequently have a poor opinion of themselves and can be very critical of themselves (Starr et al., 2015). They might concentrate on their alleged flaws, vulnerabilities, and prior transgressions. A skewed perception of oneself can result in a lower sense of value for oneself. Being unhappy with your identity, personality, or outward look can be a result of low self-esteem (Frederick et al., 2016). Self-consciousness and even self-loathing can result from having a negative self-image.

Lack of confidence and self-assurance are common indicators of low self-esteem (Hirschmüller et al., 2018). People may doubt their judgment and skills, which may lead to hesitation and insecurity. Self-doubt can make it difficult to accomplish goals and add to a helpless feeling.

Stress, anxiety, and depression are prevalent among people who have low self-esteem (Manna et al., 2016). They frequently experience life's challenges more intensely and may find it difficult to deal with setbacks. A vicious cycle of low self-esteem can be created by setbacks that serve to confirm negative self-beliefs (Rimes, 2023).

The quality of interpersonal relationships can be impacted by low self-esteem (Erol & Orth, 2017). People may have a higher propensity to draw in

and stay in unhealthy, unsupportive, or even abusive relationships (Arslan, 2016). Social interaction problems might be exacerbated by insecurity and self-criticism. It may impair goal-oriented behaviour, motivation, and concentration. Procrastination, avoidance, and decreased performance in a variety of life domains are possible outcomes (Samphirao, 2016). People may set for themselves low expectations, which can manifest into self-fulfilling prophecies.

People who have low self-esteem commonly experience extreme self-criticism and are less accepting of their own shortcomings (Eromo & Levy, 2017). They may behave in ways that undermine themselves, which would make them feel even more unworthy (Srewal et al., 2023). A lack of self-compassion may be resulting in emotional distress.

People with low self-esteem may be more vulnerable to detrimental factors like criticism or peer pressure (Vilar et al., 2015). It is likely that they may not establish limits or assert themselves sufficiently. They may take in negative indications from other people.

In summary, negative self-evaluation, self-doubt, susceptibility to stress, interpersonal difficulties, decreased achievement, and a lack of self-compassion are all indicative of low self-esteem. It can significantly affect a person's general well-being and ability to face obstacles in life with a positive and strong attitude. It is critical to understand that low self-esteem is a condition that can be treated and improved with efforts to increase self-awareness and self-esteem.

Factors contributing to the development of self-esteem

Childhood experiences: The development of self-esteem is greatly influenced by early experiences, such as parental support, encouragement, and criticism (Orth & Robins, 2022). A healthy sense of self-worth can be fostered by positive and affirming interactions with caregivers, but it can also be undermined by negative or neglectful experiences.

Social and cultural influences: People's self-esteem is shaped by a variety of factors, including peer relationships, social interactions, societal expectations, and cultural norms (Fox & Magnus, 2014). People's perceptions of themselves can be influenced by messages they receive from important people, the media, and society.

Personal achievements and competence: Self-esteem can be raised by achievements in a variety of spheres of life, including work, hobbies, academics, and personal objectives. On the other hand, low self-esteem can be caused by perceived incompetence or a history of failures (Di Giunta et al., 2013).

Self-perception and self-identity: According to Fox and Magnus (2014), self-esteem can be influenced by an individual's self-perception and the values they identify with. One's sense of self-worth is influenced by things like body image, self-acceptance, and self-compassion.

The Concept of Loneliness

Feelings of alienation, disconnection, and a perceived lack of significant social connections are the hallmarks of loneliness, an intricate and multidimensional emotional experience (Motta, 2021). An unpleasant emotional reaction to perceived isolation is loneliness. Another term for

loneliness is social pain, which is a psychological mechanism that drives people to look for connections with others. It is frequently linked to the absence of intimacy and disconnection (Tejada et al., 2020).

While loneliness and solitude overlap, they are not the same thing. Being apart from others is the definition of solitude; not everyone who experiences solitude feels alone. Loneliness is a subjective feeling that can occur in social situations being surrounded by other people as well (Roberts & Krueger, 2021). Therefore, there is a difference between feeling lonely and actually being alone. Both short-term (state loneliness) and long-term (chronic loneliness) loneliness are possible. It can be excruciating and painful in either circumstance.

Specifically, loneliness can be conceptualised as the difference between one's required and actual levels of social interaction, whereas solitude is just the absence of social interaction (Branson et al., 2017). Therefore, loneliness is a multifaceted and subjective experience; loneliness is experienced by an individual only if they believe they are alone. People can experience loneliness in large crowds or when they are alone. A person feels lonely when they feel they should be interacting with people more, or if they are not getting the kind or level of social interaction they would like. When there are too few people to talk to during a party, one may feel lonely. On the other hand, it is possible to be alone without feeling lonely; in this case, loneliness is not experienced because social interaction is not desired. There have also been arguments made for the idea that everyone has a certain ideal degree of social interaction. An individual may experience feelings of

loneliness or overstimulation if they engage in too little or too much social interaction (Winstone et al., 2021).

Loneliness can have various causes. Genetics, culture, a major loss, a lack of meaningful relationships, an over-reliance on passive technologies, or a self-perpetuating mindset are all potential causes of loneliness (Adams, 2016). According to research, individuals with loneliness can be found in all spheres of society, including successful professionals and those in marriages and other committed relationships.

Loneliness is a feeling that most people have occasionally, if not frequently. There are also various distinct implications of loneliness. Transient loneliness, or loneliness that lasts only a brief while, has been linked to benefits such as a greater focus on the quality of one's relationships (Alberti, 2019). Chronic loneliness, defined as loneliness that lasts for a considerable period of time, is typically associated with detrimental outcomes, such as an increased risk of obesity, substance use disorders, depression, cardiovascular disease, high blood pressure, and high cholesterol (Adams, 2016). Long-term loneliness is also linked to a higher chance of dying and thoughts of suicide.

It is crucial to bear in mind that loneliness can be situational, brief, or chronic, and that its degree is not always correlated with how many social interactions a person has.

Emotional Loneliness

According to Weiss (1975), emotional loneliness is a subjective emotional state in which a person feels profoundly alone and disconnected

from other people on an emotional level. It involves a sense of emotional detachment from those around them rather than just physical isolation.

The belief that one does not have access to genuine emotional support or the ability to communicate one's deepest thoughts and feelings to a person who genuinely cares about oneself is the root cause of emotional loneliness. It frequently entails a lack of empathy in intimate relationships. Even though they may have relationships with others, people who are experiencing emotional loneliness may not be emotionally intimate with them (Branson et al., 2017). They may believe that they cannot be authentically themselves or that they are unable to connect emotionally with the people they interact with.

Even in the presence of social connections, emotional loneliness can occur (Hu et al., 2020). A person may experience emotional isolation even in the presence of family, friends, or acquaintances if these connections are shallow and emotionally flat. Human well-being is largely dependent on emotional ties. They offer a feeling of safety, approval, and inclusion. When these connections are thought to be insufficient or non-existent, emotional loneliness results.

Lack of meaningful, caring relationships with other people leads to emotional loneliness. Weiss connected attachment theory to his idea of emotional isolation. Humans require close relationships, which can be satisfied by romantic partners later in life or by close family members like parents. However, close friends are the ones who fulfill this need the most. Romantic and familial loneliness were identified as distinct categories of emotional loneliness in 1997 by DiTommaso and Spinner (O'Suilleabháin et al., 2019). According to a 2019 study, social loneliness did not result in an

increase in mortality, but emotional loneliness dramatically raised the risk of death for older adults living alone (O'Súilleabháin et al., 2019).

According to Zysberg (2015), emotional loneliness can have adverse negative effects on one's mental, emotional, and physical health. These could include elevated stress levels, anxiety, despair, and low self-esteem, as well as weakened general well-being. Seeking and fostering relationships that provide emotional support and connection is essential to overcoming emotional loneliness (Alberti, 2019). This can be accomplished by promoting intimacy with others, looking for sympathetic people, and maintaining open lines of communication.

In conclusion, even in the midst of social relationships, emotional loneliness is a distressing emotional state characterized by a sense of emotional isolation and disconnection from others. It emphasizes how essential it is for people to have strong, compassionate emotional ties with one another and how crucial it is to nurture and preserve these relationships in order to prevent emotional isolation and advance emotional wellbeing.

Social loneliness

According to Matook et al. (2015), social loneliness is a specific type of loneliness that is defined by the lack of a larger social network and a sense of having few meaningful social connections. Social loneliness highlights the lack of a social network or community, in contrast to emotional loneliness, which is more focused on emotional ties. According to Motta (2021), social loneliness is characterized as a subjective emotional state in which a person feels cut off from a social group or network, engages in little to no social interaction, and believes they have insufficient social ties.

The absence of a rewarding and encouraging social network is the fundamental characteristic of social loneliness (Child & Lawton, 2019). Family, friends, acquaintances, and ties within the community can all fall under this category. People who suffer from social loneliness may be in few or no relationships with others. Perception of isolation characterizes social loneliness, even in the presence of social interaction opportunities (Campagne, 2019). It is the perception that one does not have deep social connections, is not a part of a community, and is not a part of a wider social group.

Disengagement from society and social events is frequently associated with social loneliness (Glover, 2019). People may experience a greater sense of isolation if they feel cut off from social circles, group activities, or get-togethers. Social isolation can be caused by certain significant variables.

Social loneliness can result from moving to a new city or area because people have not yet established a local social network, especially if they do not already have any friends or family there. Social loneliness can be exacerbated by the loss of important social ties brought about by events such as divorce, death, or the breakup of lifelong friendships. People who are shy or introverted by nature may find it difficult to make new friends and engage in social situations, which can result in social isolation (Aydın, 2020).

According to Arslan (2021), social loneliness can negatively impact one's mental and emotional state. Low self-esteem, anxiety, depression, and general dissatisfaction might result from it. Human beings are naturally social animals, so it is imperative to our makeup that we build and develop social connections or relationships. When these social needs are not met, it can have an impact on our mental health and emotional well-being.

According to Rokach (2018), establishing social connections proactively is often necessary as a coping mechanism for social loneliness issues. In order to accomplish this, one may look out for social opportunities, volunteer at social events, join clubs or groups with similar interests, and attempt to get connect with people in the community at large.

In summary, social loneliness is defined as the lack of a wider social network, the perception of having insufficient meaningful social relationships, and the experience of feeling disconnected from social groups. It emphasizes how important social relationships are to preventing social loneliness and improving general social well-being, as well as how essential it is for humans to engage in social interactions.

Emotional loneliness creates a void and susceptibility towards experiencing FOMO. Studies have revealed that individuals who are dealing with emotional loneliness are more likely to experience FOMO even in the midst of their friends and colleagues.

Empirical Review

With varied purposes and methodology, several studies have been conducted to provide evidence to establish the relationship between FOMO and its predictors. This study therefore reviews some of the related studies, with focus on the prevalence of FOMO among students, and its interaction with self-esteem and loneliness.

FOMO among Students

FOMO, or fear of missing out, is a word used to characterize the anxiety people feel when they believe they are missing out on social interactions, events, or experiences. Due to the widespread adoption of social

media and other technologies among university students, FOMO has grown into a topic of interest in the academic context. This empirical review aims to summarize and analyse research studies that investigate the prevalence of FOMO among university students and impact of FOMO across different age groups and geographical regions.

Even though FOMO is not age-specific, it seems to be more common in people between the ages of 18 and 34 (Abel et al., 2016). Despite FOMO being prevalent, a small portion of individuals say they have never experienced it; Milyavskaya et al. (2018) found that only 13% of their sample never experienced FOMO. The study's focus on university students can be explained by the age range in which FOMO is most prevalent, as the majority of people in Ghana in this age range attend universities.

Further investigation into the frequency of FOMO revealed that 15% of the sample had FOMO once a week or more frequently, according to Milyavskaya et al. (2018). Furthermore, 36% said they experienced FOMO less frequently than once a month, 35% said they experienced it one to three times a month, and only 13% said they had never experienced it. Due to the paucity of research on this phenomenon, the results may have a similar impact in Ghana. These findings demonstrate that FOMO is a frequent and recurrent experience for many individuals.

Recent research highlights the growing prevalence and psychological impact of Fear of Missing Out (FOMO) among university students, largely driven by increased digital connectivity and academic pressures. Przybylski et al. (2013) found that approximately 70% of university participants reported experiencing FOMO, underscoring its widespread nature and its negative

correlation with life satisfaction. This trend is closely tied to students' preference for social media engagement over face-to-face interactions, likely fueled by rapid technological advancements.

Supporting these findings, Qutishat and Abu Sharour (2019) reported a moderate FOMO mean score of 28.9 among students, suggesting that the academic environment with its intense demands and time-consuming tasks may intensify students' reliance on social media as a means of social connection and escapism. This is reinforced by Trottier (2016), who noted that constant exposure to peer activities via digital platforms may heighten feelings of exclusion.

Further, Elhai et al. (2016) linked FOMO to specific personality traits, particularly neuroticism. Students with high levels of neuroticism were more prone to experiencing FOMO due to heightened anxiety and attentiveness to social cues, increasing their susceptibility to feeling left out of rewarding experiences. Together, these studies suggest that FOMO in university students is a multifaceted issue, shaped by personality factors, academic stressors, and the pervasive influence of digital media.

Several studies have collectively emphasized the strong link between social media use, personality traits, and the psychological experiences of Fear of Missing Out (FOMO), depression, and social isolation among adolescents and young adults, including university students. Beyens et al. (2016) found a positive relationship between FOMO, social media use, and depression, indicating that prolonged engagement with social media platforms can intensify both depressive symptoms and feelings of missing out. Similarly, Andreassen et al. (2017) highlighted that personality traits, particularly those

associated with emotional instability, significantly contribute to social media addiction, with FOMO emerging as a key driving factor among college students.

Primack et al. (2017) also found that increased time spent on social media correlates with heightened perceptions of social isolation, reinforcing the idea that digital connectivity can paradoxically reduce feelings of real-world social belonging. These findings are particularly relevant in contexts like Ghana, where university students may silently endure FOMO and social isolation due to cultural norms that discourage open discussions around emotional vulnerability. Together, these studies suggest that FOMO not only contributes to addictive social media behaviors but also exacerbates mental health challenges in academic settings, calling for increased awareness and supportive interventions.

Research has shown a consistent link between increased social media use and declining well-being, with FOMO emerging as a key contributing factor. Kross et al. (2013) found that greater use of Facebook was associated with worsened emotional states among users, partly due to the psychological impact of FOMO. While this study was not specific to university students and was conducted in the United States, it underscores the importance of understanding FOMO's broader effects. Additionally, Li et al. (2020) conducted a large-scale survey in China and discovered that 15.2% of participants experienced severe FOMO, demonstrating that FOMO is not confined to Western populations. These findings highlight the global relevance of FOMO and emphasize the urgent need for localized studies in regions like Ghana and other parts of Africa, where cultural norms, digital habits, and

societal expectations may shape the experience and expression of FOMO differently.

This review of the literature emphasizes how prevalent FOMO is, affecting a significant percentage of the populace in a variety of age and geographic contexts. It can be a recurrent experience for many and is especially widespread among young adults, including university students. Developing strategies to address and manage FOMO in both clinical and everyday life contexts requires a thorough understanding of the phenomenon's scope and impacts.

FOMO and Self-Esteem

Studies have shown a robust and consistent relationship between FOMO and self-esteem in a range of age groups. According to Barry and Wong (2020), there is a significant correlation between FOMO and high levels of loneliness, low self-esteem, and low self-compassion. This suggests that FOMO is more common in people with lower self-esteem, possibly as a result of feelings of inadequacy or a greater need for validation from others.

Emerging evidence consistently shows a strong negative relationship between FOMO and self-esteem among young social media users. Wisudawati and Aqmarina (2022) found that adolescents who experienced higher levels of FOMO reported significantly lower self-esteem, suggesting that frequent exposure to idealised portrayals of peers' lives on social media can intensify feelings of inadequacy. Similarly, Buglass et al. (2017) identified a direct link between FOMO and reduced self-esteem, indicating that individuals with lower confidence may be more susceptible to the anxiety and fear associated with being left out. Supporting these findings, Elhai et al. (2016) demonstrated

that FOMO not only predicted problematic smartphone use but was also more prevalent in individuals with lower self-worth. Collectively, these studies suggest that low self-esteem plays a crucial role in both the development and intensity of FOMO, further contributing to unhealthy digital behaviours and psychological distress in adolescents and young adults.

Multiple studies have established a strong, consistent relationship between self-esteem and FOMO, suggesting that lower self-esteem significantly contributes to the development and persistence of FOMO. Przybylski et al. (2013), who developed the widely used FOMO scale, found a clear negative correlation between self-esteem and FOMO, individuals with lower self-confidence were more prone to experiencing FOMO. This is reinforced by Primack et al. (2017), who demonstrated that people with lower self-esteem were more likely to feel socially isolated and thus more susceptible to FOMO, particularly through increased use of social media. Further supporting these findings, a longitudinal study by Enez Darcin et al. (2016) confirmed that self-esteem is a predictive factor for FOMO over time, indicating that individuals with lower self-worth are at greater risk of developing FOMO in the long term. These consistent results underscore the importance of exploring this dynamic within different cultural contexts especially in Ghana where such studies are limited. Investigating the role of self-esteem in shaping FOMO among Ghanaian university students could provide culturally relevant insights and contribute meaningfully to the global body of literature.

Research continues to affirm the inverse relationship between self-esteem and FOMO across various age groups and cultural contexts. Kuss and

Griffiths (2017), in their study on young Indian social media users, found that individuals with lower self-esteem were significantly more likely to experience FOMO, particularly in relation to Facebook use. Similarly, Abel et al. (2016) demonstrated that the link between self-esteem and FOMO is not restricted by age, suggesting that individuals of all ages with lower self-worth are vulnerable to FOMO. These findings reinforce the broader psychological pattern that self-esteem is a central predictor of FOMO. However, they also highlight the need for further research into how this relationship may differ across age groups and cultural settings, including in African contexts such as Ghana, where this area remains underexplored.

The combined results of these investigations highlight the substantial relationship which holds true for all age groups between FOMO and self-esteem. Young people who use social media regularly may observe an even stronger correlation with this. Higher levels of FOMO are typically experienced by people with lower self-esteem, potentially as a result of feelings of inadequacy and a greater need for social validation. In order to promote good psychological health and lessen the anxiety brought on by FOMO, it is critical to address the prevalence of this phenomenon and the relationship it has with self-esteem.

Loneliness and FOMO

There has been some research on the relationship between loneliness and different aspects of social media use, including FOMO, even though there is not much information on loneliness as a direct predictor of FOMO. FOMO may be indirectly exacerbated by loneliness, which is frequently linked to increased social media engagement.

The increasing body of research on FOMO has brought attention to the role that solitude behaviour plays as a strong predictor of FOMO (Burnell et al., 2021). According to Chen et al. (2012), solitude behaviour is the deliberate withholding of information and emotional exchanges with other people.

A growing body of research highlights loneliness as a significant factor in the development and intensity of FOMO. Dhir et al. (2018) described FOMO as a persistent need to stay updated on others' activities, which may be heightened in individuals who experience loneliness or social disconnection. This view is supported by Lai et al. (2016), who found that people reporting higher levels of loneliness also experienced more severe FOMO, particularly concerning important social information. Similarly, Primack et al. (2017) emphasized the mediating role of loneliness in the relationship between social media use and mental health outcomes. Their study revealed that loneliness was associated with increased social media engagement, which in turn amplified FOMO. In a related study, Primack and colleagues further demonstrated that both social media use and perceived social isolation were independently associated with depression, suggesting that loneliness may indirectly fuel FOMO through heightened digital engagement. Collectively, these findings suggest that loneliness and perceived social isolation not only contribute to FOMO but also play a critical role in its link to poor mental health outcomes. Investigating this dynamic within Ghanaian university populations could yield culturally relevant insights and enhance global understanding of FOMO's psychological foundations.

A consistent relationship has been observed between loneliness, social anxiety, and FOMO, with implications for problematic digital behaviours and

mental health. Alt et al. (2015) found a positive correlation between loneliness and FOMO in young adults, indicating that individuals who experience loneliness more often are more susceptible to FOMO. Similarly, Elhai et al. (2016) reported that FOMO was significantly associated with both higher levels of loneliness and problematic smartphone use, reinforcing the idea that digital dependency may stem from or worsen feelings of isolation. Lin et al. (2016) also highlighted that increased social media use was linked to poorer mental health, which in turn was associated with greater loneliness, suggesting a possible pathway through which FOMO may emerge. Earlier, Nie and Hillygus (2002) found that lonely individuals were more likely to use the internet for social interaction, potentially as a coping mechanism for social isolation. While these studies span different populations, they collectively underscore how loneliness can both drive and be exacerbated by FOMO, particularly in the context of social media use. This interplay remains underexplored in Ghana, where further research could inform culturally sensitive interventions to mitigate the psychological effects of FOMO among university students.

A growing body of research highlights loneliness as a significant predictor and amplifier of FOMO, often interacting with social media use to intensify its effects. Wolniewicz et al. (2018) found that loneliness not only directly predicts FOMO but also influences it indirectly through social media use and feelings of social connectedness, suggesting a complex interplay between emotional and behavioural factors. Although Kuss and Griffiths (2017) did not focus specifically on FOMO, their study showed that increased Facebook use was associated with greater loneliness, an effect that may

heighten exposure to FOMO-inducing content. Multiple studies, including those by Bernard (2020), Barry and Wong (2020), and Cheng (2021), have further established a strong positive relationship between loneliness and FOMO, particularly among young adults. This reinforces the idea that loneliness can trigger anxiety about missing out on social events or peer interactions. Chen et al. (2022) added to this understanding by showing that loneliness mediates the link between problematic social media use and depressive symptoms, indicating a cyclical relationship where FOMO and loneliness feed into each other, potentially worsening mental health over time.

Loneliness and FOMO have a complicated relationship that is highlighted by the substantial body of research on the subject. While using social media as a coping mechanism for loneliness can cause people to develop FOMO, doing so may unintentionally encourage behaviours that make people feel even more lonely. Comprehending the interplay between these two concepts is essential for formulating focused interventions that seek to enhance social connectedness, decrease isolation, and alleviate the detrimental impacts of FOMO on people's mental health.

It is necessary to conduct more research to examine these relationships in a variety of demographics and settings in order to develop all-encompassing solutions to the challenges that loneliness and FOMO present in modern society.

Sex and FOMO

Psychological research has shown interest in the relationship between sex and the experience of FOMO. Studies have indicated certain sex-specific patterns and differences in FOMO's prevalence and effects, despite the fact

that it is a phenomenon that affects people of all sexes. The pertinent research papers on the influence of sex on FOMO are discussed in this empirical review.

Research on sex differences in FOMO consistently shows that females tend to experience higher levels of FOMO than males, along with distinct behavioural patterns on social media. Oberst et al. (2017) found that female college students not only reported greater FOMO but also demonstrated unique social media behaviours linked to it. Similarly, Krasnova et al. (2017) noted sex-based differences in the relationship between social media use and FOMO, with females more frequently comparing themselves to idealized portrayals of others online, which may intensify feelings of exclusion. Chou and Edge (2012) further confirmed that females are more vulnerable to FOMO and its psychological effects. While these findings are consistent across different settings, cultural contexts like Ghana may influence how FOMO is experienced and expressed. Although Ghanaian females may experience similar levels of FOMO, their socialization to be emotionally resilient could affect how they respond to it, suggesting the importance of culturally nuanced research on gendered experiences of FOMO.

Recent studies have consistently shown that while both sexes experience FOMO, females tend to report higher levels and are more susceptible to its psychological effects. Rozgonjuk et al. (2021) found that FOMO triggers vary by sex, with females more affected by social events and gatherings. Shensa et al. (2017) further confirmed that females not only use social media more frequently but are also more prone to experiencing FOMO than their male counterparts. Dhir et al. (2018) specifically highlighted

Instagram as a platform where females are more likely to engage in social comparisons, which intensifies FOMO. Supporting this, Sutanto et al. (2020) reported that females experiencing high FOMO were more likely to suffer from negative psychological outcomes, including increased stress and decreased life satisfaction. These findings suggest that FOMO is not only shaped by individual behaviour but also by gendered patterns of social media use and comparison, making sex a significant factor in how FOMO develops and affects well-being.

These findings suggest that there may exist sex-related variations in the prevalence and experiences of FOMO, even though the research on sex influences on that condition is still developing. Due to differences in social and psychological factors, females may report higher levels of FOMO and display different FOMO-related social media behaviours. To effectively tailor interventions and strategies to address FOMO in both male and female populations, it is imperative to comprehend these sex differences. A comprehensive knowledge and understanding of these sex influences in a range of cultural and demographic contexts will require more research.

Conceptual framework of the Study

A conceptual framework, shown in figure 1, illustrates the relationship between the different variables under investigation based on the literature review mentioned above. The figure shows the anticipated relationships between the study's variables. Figure 1 indicates what is anticipated, which is self-esteem predicts FOMO as it is believed that when individuals with low self-esteem see their peers having fun or engaging in exciting activities, they may feel a sense of inadequacy or self-doubt (Orth & Robins, 2022). They

may worry that they are missing out on something important or that they are not as valued or appreciated as their peers. When this happens, there is a greater chance that they will develop FOMO. Loneliness has also been hypothesized as a predictor of FOMO. Individuals who experience loneliness may experience a feeling of missing out on social connections and experiences, stemming from feelings of sadness and isolation (Eisenberger, 2012). Sex has been reported to have significant influence in the levels of FOMO among individuals. Some studies suggest that females are more prone to developing FOMO and other studies reporting the opposite. Therefore, in this research, sex moderates the relationship between self-esteem and FOMO, also the relationship between loneliness and FOMO. Given this, it is anticipated in this study that when individuals have high self-esteem and no presence of loneliness, they will experience low to no level of FOMO.

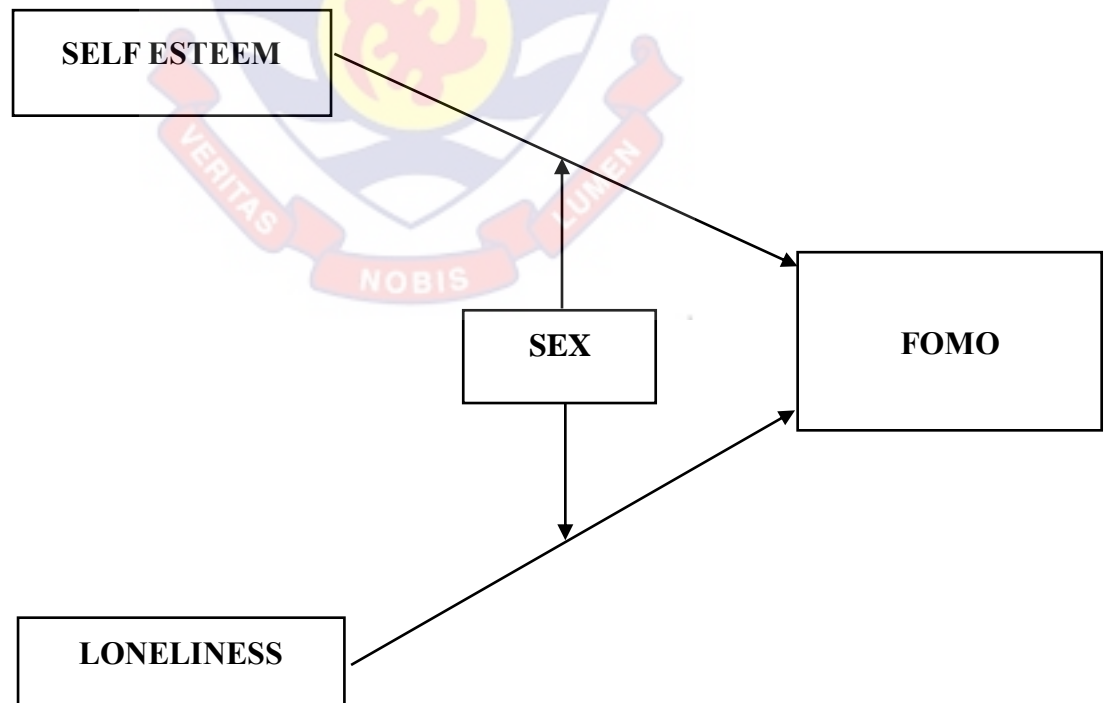
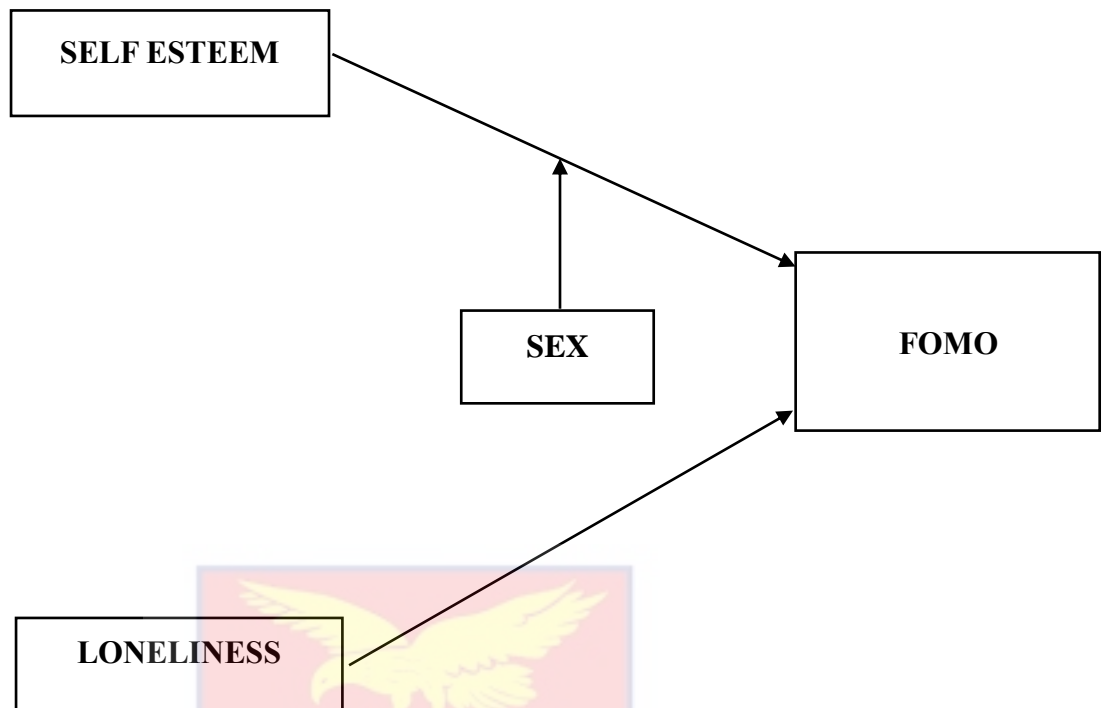


Figure 1: Conceptual framework for the study

Source: Field work (2023)

Figure 2: Observed Conceptual Framework

The observed conceptual framework was constructed from the findings of this study. It indicates that self-esteem and loneliness predict FOMO. Sex also moderates the relationship between self-esteem and FOMO but does not moderate that of loneliness and FOMO.

Summary of Literature Review

Several broad concepts related to self-esteem, loneliness, and FOMO have been reviewed in this chapter. Three primary headings were used for the review process: theoretical, conceptual, and empirical. The self-determination theory, the loneliness theory, and Rosenberg's self-esteem theory were all examined in the theoretical review. The concepts of loneliness, self-worth, and FOMO were also considered in the conceptual review. The empirical reviewed a few related studies on the prevalence of FOMO, the role that loneliness and low self-esteem play in the development of FOMO, and the sex differences in these variables.

CHAPTER THREE

RESEARCH METHODS

Introduction

This study investigated the prevalence of FOMO, its predictors, and the moderating effect of sex in the relationship between FOMO and its predictors among Ghanaian university students. The research methods used for the study are covered in this chapter. This chapter will cover the following topics in particular: the research design, study area, population, sample and sampling procedure, data collection instruments, data collection procedure, as well as data processing and analysis.

Research Design

With the positivist paradigm, the researcher used a quantitative approach, more precisely a descriptive cross-sectional survey design. "Rationality, objectivity, prediction, and control" are highly valued in the positivist paradigm (Kelly et al., 2018). According to Bradshaw et al. (2017), the ontological premise holds that there is only one reality that exists and can be verified by the senses. The epistemological premise is that by closely measuring the phenomenon of interest, knowledge can be defined and investigated. According to researchers, every human behaviour is objective, intentional, and quantifiable (Kelly et al., 2018). As stated by Mohajan (2008), it includes the examination of research questions or hypotheses that determine the concept's prevalence and characteristics, test the relationship, evaluate the cause-and-effect relationship between variables, and determine the efficacy of interventions. By gathering comprehensive and accurate data that characterizes the current phenomenon with the target population, the

descriptive cross-sectional survey design allows the researcher to gain insight into the broader population from which the sample is drawn. Because I intend to achieve external validity and extrapolate the study's findings to a broader population, this design is thought to be the most appropriate method. Finding new meanings, describing what is known, figuring out frequency, and classifying, counting, or measuring data are the main goals of this research. However, results can be influenced by inaccurate self-reporting or social desirability bias. Low response rates or unrepresentative samples can also limit the validity of findings.

Study Area

The University of Cape Coast, situated in Ghana's central region of Cape Coast, served as the study's location. A public university, the University of Cape Coast (UCC) is situated in Cape Coast, in the central region of Ghana, West Africa. It was founded as a university college in 1962, and in 1971 it was given full university status. As one of the top universities in Ghana and the West African sub region, UCC is renowned for both its dedication to community development and its high calibre of academic programs. Numerous undergraduate and graduate programs in education, humanities, social sciences, business, science, technology, and health sciences are available at the university.

The university boasts a stunning, well-kept campus with state-of-the-art amenities like fully furnished lecture halls, labs, libraries, sports facilities, and dorms for students. The Ghana Centre for Entrepreneurship, Employment, and Innovation (GCEEI), which supports small business development and entrepreneurship in Ghana by offering training, research, and consulting

services, is also housed at the university. With a focus on social responsibility and community involvement, UCC features a vibrant and diverse student and staff community.

The university collaborates and partners with organizations and institutions in Ghana and around the globe, offering staff and students the chance to participate in exchange programs, research, and other international cooperation opportunities. All things considered, the University of Cape Coast is a well-known and dynamic organization that provides students with a top-notch education and an eclectic cultural experience.

Population

The study's target population consisted of university students in Ghana. The University of Cape Coast's regular undergraduate students made up the accessible population with the focus on students from level 100 to 400, across all halls of residence. According to the student's records of UCC, there is a total of 15,721 male students and 11,767 female students, making a total student population of 27,488 regular undergraduate students.

Sample and Sampling procedure

442 respondents in total were selected as a sample size from the study's accessible population. The Yamane formula provides justification for this figure. With the Yamane formula, $n = \frac{N}{1+N(e^2)}$ where N is population size and e is level of precision. Using this formula, a calculated sample of, $n = \frac{27488}{1+27488(0.0025)}$, 442 with an additional 10% non-response rate was drawn from the entire student population with an error margin of 5% and a confidence level of 95%.

A convenience sample technique was employed to choose participants for the research. Convenience sampling entails selecting the people who are closest to you as your respondents, and the process is repeated until the necessary sample is obtained (Cohen et al., 2007). This technique was chosen because the respondents were reached out to using google forms sent to their various WhatsApp pages through their course representatives.

Inclusion Criteria

- Only regular undergraduate students were eligible for the study.
- Students who owned portable smart devices.
- Active social media users with one or more accounts on WhatsApp, Instagram, Twitter, or Facebook

Exclusion criteria

- Respondents who are not regular undergraduate students were excluded from the study.
- Students who do not own a smart portable device.
- No access to social media and are not active social media users were not included in the study.

Data Collection Instruments

To gather quantitative data from study respondents, the following adopted scales were used. These structured questionnaires which includes the FOMO scale, Rosenberg self-esteem scale and the UCLA loneliness scale were the main instruments for the collection of data.

Fear of missing out scale

The Fear of Missing Out scale (Przybylski et al., 2013) consists of ten items. A 5-point scale, with 1 denoting "Not at all true of me" and 5 denoting

"Extremely true of me," was used to positively anchor responses to items such as "I fear others have more rewarding experiences than me." An average score between one and five was obtained using the scale. Higher scores indicate a greater fear of missing out. The scores range from 10 to 50. Moderate (24–37), high (38–50), and low (10–23). The scale had a Cronbach's coefficient alpha of .88, a strong internal consistency (Przybylski et al., 2013).

The Rosenberg Self-Esteem Scale

Rosenberg (1965) developed the scale. This 10-item measure gauges one's overall sense of worth by accounting for both positive and negative self-perceptions. It is proposed that the scale is one-dimensional. A 4-point Likert scale, ranging from strongly agree to strongly disagree, is used for all item responses. Scores range from 10-40 with low (10–25), medium (26–29) and high (30–40). The scale had a Cronbach's coefficient alpha of .92 which translates a strong internal consistency when reliability was applied.

UCLA Loneliness Scale (Version 3)

Daniel Russell created the UCLA Loneliness Scale in 1996. It is a 20-item measure meant to assess an individual's subjective experiences of social isolation and loneliness. Either O ("I often feel this way"), S ("I sometimes feel this way"), R ("I rarely feel this way"), or N ("I never feel this way") are the ratings given by participants to each item. The possible score is between 20 and 80. A range of 20–34 represents a low level of loneliness, 35–49 a moderate level, 50–64 a moderately high level, and 65–80 a high level. The scale exhibits strong internal consistency, as indicated by its Cronbach's coefficient alpha of .71 when reliability analysis was done.

Validity and Reliability

Validity and reliability are essential in ensuring that research instruments measure what they intend to measure and do so consistently. A pilot study was therefore conducted with 50 students from the University of Education, Winneba to test the clarity, suitability and reliability of the instruments before administering the full survey of 442 respondents.

The pilot used three instruments: the FOMO Scale, the UCLA Loneliness Scale (Version 3) and the Rosenberg Self-Esteem Scale. Data were collected in a single session, and responses were screened for completeness. Reliability analysis produced Cronbach's alpha values of .87 for the FOMO Scale, .91 for the UCLA Loneliness Scale and .71 for the Rosenberg Self-Esteem Scale. These results indicated strong internal consistency for the FoMO and loneliness measures and acceptable reliability for the self-esteem scale.

Demographic Characteristics

As part of the data collection instruments, demographic that was of interest to the researcher was the sex of respondents, as it was hypothesised to play a moderating role in the relationship between Self-esteem and FOMO, as well as Loneliness and FOMO.

Data Collection Procedure

The researcher attached an introductory letter to google forms that contained the questionnaires to be responded to. The researcher located the respondents using their various social media platforms.

With the respondents, the goals of the study and the ethical issues were fairly discussed in the google forms. An option to decline participation in the

study was provided. The purpose of obtaining respondents' consent was to guarantee their complete indulgence and participation in the research. The confidentiality of information was guaranteed to the respondents. The questionnaire contained explicit instructions on how the items were to be answered. Respondents were made aware that they can contact the principal investigator to ask for clarification pertaining to any of the questions they did not understand.

No individual was held under coercion to be a participant in the study. To gather the necessary data, questionnaires with the various study scales were posted on the respondents' social media platforms by contacting the class representatives and permission sought before the link to the google forms were sent out. The google forms allowed ample time for respondents to finish the questionnaire. Data was collected in the span of one and a half months, with a response rate of 99% and a 1% decline. Respondent used 15-20 minutes in responding to the questionnaires.

Data Processing and Analysis

The first stage of the data processing was editing all the responses derived from the questionnaires that the respondents gave. This was done to check for any omissions and that the questionnaires were correctly responded to, without making any alterations to the responses. After the editing was completed, the data was extracted from the excel of the google forms and onto version 26.0 of the Statistical Package for Social Sciences (SPSS v26). For the coding process, numerical values were assigned to all the variables in the questionnaire before the analysis was done.

Reliability analysis was first run against the sample of the study to ascertain the reliability of the various instruments. The FOMO scale had a Cronbach's alpha of .87, UCLA loneliness scale was .91 and Rosenberg Self-esteem scale was .71. Composite scores of the various instruments were computed and used to run the analysis.

The demographic data from the research was analysed using frequencies and percentages. Frequencies and percentages were utilized to answer research questions one (1) to three (3). They are appropriate for summarising distributions and providing an immediate overview of how common each condition is within the sample. An alpha level of 0.05 and a confidence interval of 95% were used to test each hypothesis. The first and second research hypotheses were tested using linear regression. Regression provides coefficients, effect sizes and significance values needed to determine predictive strength. Using Hayes Process Macro, a moderation analysis was carried out for hypotheses three (3) and four (4). The Hayes Process Macro was appropriate because it performs moderation analysis efficiently, generates interaction terms and reports conditional effects supported by bootstrapped confidence intervals.

Data Management

Data was collected, coded, and inputted into SPSS for further analysis. Collected data from the field was inspected and kept in a secured online storage. The handling of the data was limited to the researcher. Data was stored on a Google Drive folder for safety and security. After the data had been captured, the completed questionnaire samples were only with the

researcher and was deleted as soon as the researcher was done with the research.

Ethical Considerations

The respondents received a brief explanation of the study's objectives, emphasizing procedures, benefits, and contributions of the research to all involved parties and stakeholders. Any information that was gathered from the participants was kept highly protected and specific data was not divulged at liberty. Identities of the respondents were withdrawn from the records of the research to keep them hidden and unknown. The survey did not require respondents providing their names when they were responding to the questionnaire. Partaking in this research was made totally voluntary and respondents were not under any mandatory obligation to respond to the research questionnaire items against their will. The researcher therefore respected the decision of any respondent who do not wish to partake in the survey to retract at any moment. In order to safeguard research respondents' interests, the environment, the community, and the industry, and avoid risking the individuals being studied, the researcher applied to UCC's Institutional Review Board (UCCIRB) for approval to carry out the field study. Protocol was given for the field study to be carried out with IRB number CES/ERB/UCC/edu/v8-23/72.

Chapter Summary

Descriptive cross-sectional survey design was used in the study. There were 27,488 people in the accessible population, of which 442 made up the sample size. The technique of convenience sampling was applied when gathering the data. Three standardised questionnaires were used to collect the

data at the University of Cape Coast: the UCLA loneliness scale (version 3), the Rosenberg self-esteem scale, and the fear of missing out scale. The study was guided by four hypotheses and three research questions. Descriptive statistics were used to analyse the research questions and the demographic data. An alpha of 0.05 and a confidence interval of 95% were used to test each hypothesis. The first and second research hypotheses were tested using linear regression (2). Using Hayes Process Macro, a moderation analysis was carried out for hypotheses three (3) and four (4).



CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the findings from the data analysis that was completed. This study investigated the prevalence and predictors of FOMO among university students in Ghana. The moderating role of sex in the relationship between the predictors and FOMO was also investigated in this study. IBM SPSS Statistics version 26 was used to analyse the data for both descriptive and inferential statistics.

Demographic information

The demographic information of respondents comprises sex and its distribution. Other demographic variables like the age, level, programme of study were not included in the questionnaire as the focus was primarily on the prevalence across all university students. Table 1 displays the findings.

Table 1: Demographic information

	Frequency	Percent (%)
Sex		
Male	252	57.0
Female	190	43.0

Source: Field Data, 2023

Table 1 displays the result, which indicates that 43% of respondents were female and 57% of respondents were male.

Analysis of Research Questions

Information pertaining to the research questions was provided in this section. A thorough analysis of the data and the findings is presented in each section. Each of these aims to accomplish the primary goal of the research.

Research question one:

What is the prevalence of FOMO among university students?

This research examined the prevalence of FOMO among university students. The respondents' degree of FOMO was gauged using a 10-item standardized scale. An average score between one and five was obtained using the scale. Higher scores indicate a greater fear of missing out. The scores range from 10 to 50. Moderate (24–37), high (38–50), and low (10–23). The respondents were divided into two groups, low and moderate, based on their scores. The specifics of the outcomes are given in Table 2.

Table 2: Prevalence of fear of missing out (FOMO)

	Frequency	Percent (%)
Low	238	53.8
Moderate	204	46.2

Source: Field Data, 2023

The results in Table 2 indicate that low level of FOMO was prevalent among 53.8% of the students while moderate level prevalent in 46.2% of them.

Research question two:

What is the level of self-esteem among university students?

The degree of self-esteem among university students was investigated in the study. A standardised 10-item scale was employed to determine the

respondents' degree of self-esteem. There are three score ranges: low (10–25), medium (26–29), and high (30–40). The composite scores of the respondents were categorised into the levels given on the scale. Table 3 provides the details of the result below.

Table 3: Self-esteem among university students

	Frequency	Percent (%)
Low	74	16.7
Medium	102	23.1
High	266	60.2

Source: Field Data, 2023

The findings showed that self-esteem was high in 60.2% of the students, medium in 23.1% and low in 16.7% of them.

Research question three:

What is the level of loneliness among university students?

A 20-item measure was used to assess university students' feelings of loneliness. The possible score is between 20 and 80. A range of 20–34 represents a low level of loneliness, 35–49 a moderate level, 50–64 a moderately high level, and 65–80 a high level. The table below provides illustrated details.

Table 4: Level of loneliness

	Frequency	Percent (%)
Low degree	8	1.8
Moderate degree	104	23.5
Moderately high degree	320	72.4
High degree	10	2.3

Source: Field Data, 2023

The findings displayed in Table 4 demonstrate that the degree of loneliness is moderately high among 72.4% of the students. It can be observed that loneliness was moderate, high and low among 23.5%, 2.3% and 1.8% of the students respectively.

Hypotheses Testing

Four hypotheses served as the study's compass. Using a 95% confidence interval and a 0.05 alpha threshold, these hypotheses were tested. The statistical tool that was employed and its interpretation were highlighted for every section.

Research hypothesis one

H₀: Self-esteem does not significantly predict FOMO among university students.

This hypothesis sought to ascertain whether self-esteem predicts FOMO. The composite scores computed for the respondents was used for the regression analysis. Table 5 presents the results.

Table 5: Predictive relationship between self-esteem and FOMO

	B	S.E	B	T	Sig.
(Constant)	37.163	1.716		21.658	.000
Self esteem	-.470	.055	-.377	-8.551	.000

Source: Field Data, 2023

A linear regression was performed to determine the predictive relationship between self-esteem and FOMO. Regression model $F(1,440) = 73.122$, $p < .001$, indicated statistical significance. The variance in FOMO was explained by the model to be 14.3%. The result indicated that self-esteem significantly predicted FOMO ($\beta = -.377$, $p < .001$). This suggests that when

students have high level self-esteem, they are less prone to feel the fear of being left out. As indicated by the result, we fail to accept the null hypothesis in favour of the alternative hypothesis.

Research hypothesis two

H₀: Loneliness does not significantly predict FOMO among university students.

The second hypothesis sought to ascertain whether loneliness predicts FOMO.

Table 6 presents the results.

Table 6: Predictive relationship between loneliness and FOMO

	B	S.E	B	T	Sig.
(Constant)	12.580	2.203		5.711	.000
Loneliness	.188	.041	.216	4.631	.000

Source: Field Data, 2023

To determine the predictive relationship between loneliness and FOMO, a linear regression analysis was conducted. At $F(1,440) = 21.442$, $p < .001$, the regression model was statistically significant. FOMO variance was explained by the model to the tune of 4.6%. The results revealed that loneliness significantly predicted FOMO ($\beta = .216$, $p < .001$). This suggests that when students are lonely, a greater likelihood of FOMO is experienced by them. Based on this finding, we fail to accept the null hypothesis in favour of the alternative hypothesis.

Hayes Process Macro-Moderation Analysis

The third and fourth hypotheses examined the interaction influence of sex on (a) the relationship between self-esteem and FOMO and (b) the

relationship between loneliness and FOMO. An investigation into the role sex plays in these relationships was done using a moderation analysis. Self-esteem and loneliness were the predictor variables, sex was the moderator, and FOMO was the criterion variable. Andrew F. Hayes' PROCESS was used to perform the moderation analysis. For every analysis, 5,000 bootstrap samples were used for the moderation process. The moderation analysis's findings are displayed in Tables 7 and 8 below.

Research hypothesis three

H₀: Sex does not significantly moderate the relationship between self-esteem and FOMO among university students.

Table 7: Interaction effect of sex on the relationship between self-esteem and FOMO

	B	SE B	t	P	LLCI	ULCI
constant	53.23	5.29	10.07	.00	42.84	63.62
Self-esteem	-.90	.17	-5.31	.00	-1.23	-.56
Sex	-10.67	3.37	-3.17	.00	-17.28	-4.05
Int_1	.28	0.11	2.60	.01	.07	.49
Conditional effects of the focal predictor at values of the moderator(s)						
Male	-.62	.07	-8.22	.00	-.76	-.47
Female	-.34	.08	-4.32	.00	-.49	-.18

Model Summary: $R^2 = .18$; $F(3,438) = 32.13$, $p = .00$

Int_1: Self-esteem * Sex: $R^2\text{-chng} = .01$; $F(1,438) = 6.75$, $p = .01$

Criterion: FOMO

The result as presented in table 7 above indicates that sex reduces the likelihood of students experiencing FOMO ($B = -10.67$, $p = .03$). The relationship between self-esteem and FOMO is significantly moderated by sex

[$B = .28, t = 2.60, CI (.07, .49), p = .01$]. The results suggest that sex augments, mitigates, or opposes how self-esteem relates to FOMO. The conditional effects of RSE on FOMO at different values of Sex are shown in table 7. As shown in the table, the effect of RSE on FOMO is stronger for males than for females. To interpret the interaction term, we can look at the conditional effects of RSE on FOMO at different values of sex. The results in the output show that for males, a one-unit increase in self-esteem is associated with a decrease of .62 units in FOMO ($t = -8.22, p = .00$). For females, a one-unit increase in self-esteem is associated with a decrease of 0.34 units in FOMO ($t = -4.32, p = .00$). This means that an increase in self-esteem has a stronger impact on lowering FOMO in males as compared to females.

Research hypothesis four

H_0 : Sex does not significantly moderate the relationship between loneliness and FOMO among university students.

Table 8: Interaction effect of sex on the relationship between loneliness and FOMO

	B	SE B	T	P	LLCI	ULCI
constant	15.46	6.57	2.35	.02	2.55	28.37
Loneliness	.19	.12	1.60	.11	-.05	.43
Sex	-2.90	4.66	-.62	.53	-12.07	6.27
Int_1	.01	.09	.14	.89	-.16	.25

Model Summary: $R^2 = .08; F(3,438) = 12.03, p = .00$

Int_1: Loneliness * Sex: $R^2\text{-chng} = .00; F(1,438) = .02, p = .82$

Criterion: FOMO

The result as presented in Table 8 indicates that sex does not significantly moderate the association between FOMO and loneliness [$B = .01,$

$t=.14$, CI $(-.16, .25)$, $p=.89$]. The results suggest that sex does not augment, mitigate, or oppose how loneliness relates to FOMO.

Discussion of Results

The analysis concluded showed that FOMO was prevalent in moderate to low levels among university students. Self-esteem and Loneliness were both significant predictors of FOMO. Also, sex significantly moderated the relationship between Self-esteem and FOMO but not that of Loneliness and FOMO.

Prevalence of Fear of Missing Out (FOMO)

With regards to the research question one (1), the goal of the study was to investigate the prevalence of FOMO among university students. According to the findings, a significant percentage of university students report experiencing FOMO. This might be a result of the hectic schedules of extracurricular activities, social events, and academic obligations that characterize university life. Students may worry about missing out on academic opportunities, social gatherings, or even the newest trends.

This result corroborates other studies done on FOMO involving young adults, especially university students in several ecological settings. Young adults are the focus as a result of their rapid adaptability to digital and technological advancement. According to reports, FOMO is prevalent in people between the ages of 18 and 34 (Abel et al., 2016). In a study conducted on college students, Milyavskaya et al. (2018) investigated the frequency of FOMO and found that 15% of the sample experienced it once a week or more often. Furthermore, 35% of respondents said they experienced FOMO one to three times per month, 36% said they experienced it less frequently than once

per month, and only 13% said they had never experienced it. These results demonstrate that FOMO is a prevalent and recurrent experience for a significant percentage of people.

A 2019 study by Qutishat and Abu Sharour was another that produced results that were consistent with this research. In an effort to determine whether the academic setting may have an impact on students' experiences of FOMO, both in terms of frequency and severity. They found that, with a mean score of 28.9, students had a moderate degree of FOMO. This indicates that the incidence and severity of FOMO in this group may be influenced by the academic setting.

A study by Przybylski et al. (2013) that examined the prevalence of FOMO among college students was discovered through further investigation into finding research works that support the hypothesis tested by this study. Approximately 70% of participants said they had experienced FOMO. Additionally, the study emphasized how FOMO has a detrimental effect on life satisfaction. The results of the research work previously discussed are supported by the findings of this study.

According to Trottier (2016), the result of the research question may indicate that the increased prevalence of FOMO in the setting of university life is a result of the unparalleled accessibility of social media platforms and digital communication, which provide continuous exposure to peer activities and social events in real time. This heightened exposure, coupled with the innate human desire for social connectedness and acceptance, has paved the way for FOMO to emerge as a prevalent emotional state among the university student population.

These findings show a clear indication that the basic needs theory by Ryan and Deci is supported and that individuals tend to look for ways of building social relationships when they feel their social needs are not being met. This stems from the fact that others may be having more rewarding experiences than them.

Level of Self-esteem

This research question sought to determine the level of self-esteem among university students. The results revealed that self-esteem was high in 60.2% of the students, medium in 23.1% and low in 16.7% of them. This finding shows that more than half of the respondents have high self-esteem which is an important quality that must be exhibited and also plays a crucial role in a person's mental and emotional well-being. However, a substantial number still have medium or low self-esteem.

The results obtained from this research question have provided insight into the state of students' self-esteem. These findings shed light on students' wellbeing and have a number of significant ramifications. The fact that 60.2% of students reported high self-esteem is a positive aspect of the results. Higher levels of self-confidence, emotional fortitude, and a positive outlook on life are linked to high self-esteem (Jordan & Zeigler-Hill, 2020). Students who have a high sense of self-worth are frequently better able to handle difficulties in educational environments and are more inclined to look for and seize personal development opportunities.

The 23.1% of students who reported medium self-esteem levels fall in the middle of the self-esteem spectrum. They may experience fluctuations in their self-worth depending on various life events and circumstances. Moderate

self-esteem can offer a balance between self-assuredness and humility, allowing students to adapt to different situations and learn from their experiences (Alesi et al., 2012).

A particularly concerning group of students are the 16.7% who have low self-esteem. A student's life can be negatively impacted by low self-esteem in a number of ways, including their mental health, academic performance, and social relationships (Lee, 2020). It may lead to self-doubt, increased susceptibility to stress and anxiety, and a reluctance to pursue opportunities.

High self-esteem during the college years can contribute to a more positive college experience, which may, in turn, have long-term effects on the wellbeing and success of students in the future (Fox & Magnus, 2014). These students may be better prepared for the challenges they face after graduation.

These results highlight the need for a holistic approach to student wellbeing. It's not just about academic performance but also about emotional and psychological health. A supportive and nurturing environment that encourages students to develop and maintain healthy self-esteem can lead to a more positive and productive college experience.

The findings revealing the distribution of self-esteem levels among university students provide valuable insights into the psychological well-being of this population. The fact that a significant percentage of students have low self-esteem highlights the significance of attending to the mental health needs of the student body, even though the prevalence of high self-esteem is encouraging. These results call for ongoing efforts to foster self-esteem and

resilience in students, ultimately contributing to their personal and academic growth.

Level of Loneliness

Loneliness is a significant concern, especially among university students who may be away from their support networks and facing new challenges. The purpose of this research question was to determine university students' level of loneliness. Loneliness was found to be moderately high among the majority (72.4%) of university students. This is a concerning finding as high levels of loneliness can have detrimental effects on mental health and well-being (Uram & Skalski, 2022). The varying degrees of loneliness reported by students (moderate, high, and low) highlight the need for interventions and support services to address the mental health and social well-being of university students.

This finding confirms several studies with the viewpoint on the level of loneliness that exists in the academic context. This is because university life is often marked by significant transitions, increased academic demands, and a new social environment. Primack et al. (2017) looked into the relationship between young adults' use of social media and their perceptions of social isolation and loneliness, including those who attend universities. Higher levels of social media use were associated with feelings of loneliness and social isolation, according to the research, which may make students' emotional burdens even greater. University students may experience increased feelings of loneliness and inadequacy as a result of their continuous exposure to social media platforms' manicured social lives and idealized images.

Making the switch to university life can also be a time when loneliness is most susceptible. This confirms a longitudinal study by Stallman (2010), who observed that first-year university students often experience heightened levels of loneliness, which can be attributed to the challenges of adjusting to a new environment, making new social connections, and managing academic stress.

The result of this findings is congruent to a research work by Alt et al. (2015), that concentrated on loneliness and FOMO among students. The study also found a positive correlation between loneliness and FOMO, so as loneliness increases, FOMO is also heightened. These negative emotional states can hinder academic performance and cause a decline in the quality of life during university years.

The degree of loneliness experienced by university students can be linked to their adjustment to campus life, coupled with the pressures of academic life and social media's pervasiveness (Hunt et al., 2018). It is essential to comprehend the complex nature of loneliness among university students in order to create interventions and support systems that can lessen its effects and promote students' emotional and academic success throughout their time in school.

Predictive Relationship between Self-esteem and FOMO

This hypothesis aimed to ascertain whether self-esteem predicts FOMO. The results indicate that self-esteem and FOMO have a negative predictive relationship. This provides valuable insights into the psychological dynamics of how these two constructs interact among the studied population.

This finding has several important implications and adds to our comprehension of the interplay between self-esteem and FOMO.

It is implied by a negative predictive relationship between self-esteem and FOMO that FOMO tends to decrease with increasing self-esteem and vice versa. In simple terms, people who have higher self-esteem tend to be less prone to FOMO, whereas people who have lower self-esteem are more likely to experience it.

Buglass et al. (2017) found a link between FOMO and lower self-esteem, which is consistent with the findings of this current study. It seems that people who have lower self-esteem might be more prone to the fear and anxiety that come with FOMO.

In line with this finding, Barry and Wong's (2020) study also discovered a significant relationship between FOMO and high levels of loneliness, low self-esteem, and low self-compassion. This suggests that FOMO is more prevalent in people with lower self-esteem, possibly because of feelings of inadequacy or a greater need for validation from others.

These results suggest that self-esteem might function as an impediment to the onset of FOMO. Higher self-esteem is associated with a more positive self-concept, increased self-assurance, and a stronger sense of self-worth (Kim & Lee, 2021). This, in turn, may reduce their need for constant social validation and their fear of being left out or missing out on social experiences.

Low self-esteem can contribute to the fear of missing out in several ways. Individuals with low self-esteem may be more likely to compare themselves to others, feel inadequate in social settings, and perceive others'

lives as more exciting or fulfilling (Starrs et al., 2015). These feelings can intensify the experience of FOMO.

The negative predictive relationship between self-esteem and FOMO highlights the potential mental health implications. FOMO is associated with anxiety, stress, and feelings of inadequacy. By contrast, individuals with higher self-esteem often exhibit greater psychological resilience and reduced vulnerability to these negative emotions (Orth & Robins, 2022).

Self-esteem is affected by social comparison, which is the act of evaluating oneself in relation to others. People who perceive themselves as superior to others in areas that matter to them are more likely to have high self-esteem. Conversely, individuals who perceive themselves as inferior to others are more likely to have low self-esteem. This theory is supported by the findings of this study which shows how having a low self-esteem can contribute to higher levels of FOMO.

These findings underscore the importance of promoting self-esteem among individuals, particularly in contexts where FOMO is prevalent. Educational institutions, mental health professionals, and support services can design interventions and programs that focus on the development of self-esteem, self-acceptance and self-confidence as a means to mitigate FOMO-related distress.

Predictive Relationship between Loneliness and FOMO

The hypothesis sought to investigate whether loneliness does predict FOMO. The results indicate that loneliness positively predicts FOMO, implying that students who experience greater loneliness are more likely to experience FOMO.

A positive predictive relationship suggests that as loneliness increases, so does FOMO. This means that individuals with higher levels of loneliness, are more prone to experiencing FOMO. The results imply that loneliness can act as a precursor or trigger for FOMO. Feelings of social disconnection and isolation are common components of loneliness. (Rokach, 2018). To alleviate these feelings, individuals may turn to social media or other online platforms, seeking connection, which can, in turn, intensify the feeling of missing out.

Social media use may be connected to the positive relationship between loneliness and FOMO. In order to make up for their feelings of social isolation, lonely people may spend more time on social media, exposing them to idealized portrayals of others' lives, events, and experiences. This heightened exposure can contribute to FOMO.

Mental health issues like stress, anxiety, and depression are associated with loneliness as well as FOMO (Child & Lawton, 2019). The positive predictive relationship between these constructs highlights the potential for a cascade effect, where loneliness may lead to heightened FOMO, which, in turn, exacerbates negative emotional states.

When people compare their lives to those of others who appear to have perfect lives, social comparison can have detrimental effects on such individuals that are exacerbated by loneliness (Cramer et al., 2016). Social media frequently facilitates this kind of social comparison, which can be a potent FOMO trigger.

Weiss' Loneliness theory is strongly supported by the findings of this study. A person feels lonely when they feel they should be interacting with people more, or if they are not getting the kind or level of social interaction

they would like. This pushes them to consume more social media content of other just to keep up with what they are doing.

This underlines the need to address loneliness as a potential contributing factor to FOMO and the associated negative psychological outcomes. The positive predictive relationship between loneliness and FOMO highlights the potential vicious cycle between these two factors. Loneliness can lead to FOMO as students attempt to seek social connections or validation through social events and online interactions. This, in turn, can increase loneliness if students feel excluded or unfulfilled.

These results underscore the need for healthy coping mechanisms to manage loneliness and the associated FOMO. Encouraging individuals to seek real-world social connections, engage in activities they enjoy, and limit excessive social media use can be beneficial.

Interaction effect of sex on the relationship between self-esteem and FOMO

The initial result suggests that sex has a significant impact on the likelihood of experiencing FOMO. Specifically, it indicates that being male reduces the likelihood of experiencing FOMO, which is an interesting finding in itself. This may be related to differences in how males and females engage in social and digital activities, or it could be linked to differences in social comparison or FOMO triggers.

The crucial finding in this analysis is that sex moderates the relationship between self-esteem (RSE) and FOMO. Sex appears to influence how self-esteem relates to FOMO. The interaction effect signifies that sex plays a role in shaping the impact of self-esteem on FOMO. When examining the conditional effects, it is clear that self-esteem has a more pronounced

effect on reducing FOMO in males compared to females. This means that an increase in self-esteem has a stronger impact on lowering FOMO in males as compared to females. These findings highlight that sex has a significant role in how self-esteem influences FOMO.

Understanding these sex differences could be crucial for interventions or strategies aimed at reducing FOMO, as they may need to be tailored differently for males and females. Additionally, the results suggest that building self-esteem might be a particularly effective way to combat FOMO in males.

Interaction effect of sex on the relationship between loneliness and FOMO

The findings suggest that there is no significant moderating effect of sex on the relationship between FOMO and loneliness. Sex does not appear to significantly influence how loneliness relates to FOMO. The non-significant interaction effect suggests that loneliness affects FOMO similarly for both males and females.

The absence of significant sex moderation implies that the relationship between loneliness and FOMO remains consistent regardless of individuals' sex identities. This finding implies that the experience of loneliness and FOMO may not vary substantially between male and female individuals.

The absence of sex as a significant moderator highlights the universal nature of emotional experiences such as loneliness and FOMO. It underscores the idea that these psychological states can transcend gender differences and may be influenced by similar underlying mechanisms and social dynamics across diverse gender groups.

The analysis of the result may further suggest that mental health interventions targeting these emotional states can be designed to be inclusive and applicable to individuals of both sexes. Such interventions can focus on addressing common triggers and coping strategies that are relevant to all individuals, regardless of sex.

This finding could imply that strategies for addressing FOMO related to loneliness may apply consistently across genders. It may also highlight that loneliness has a strong and consistent impact on FOMO regardless of sex.

Chapter Summary

The study's results and discussions were covered in this chapter. FOMO was prevalent among university students. According to this research, over 50% of the respondents have high self-esteem, which is a vital trait that needs to be demonstrated and is also essential to one's mental and emotional health. Most university students were found to have moderately high levels of loneliness. While loneliness and FOMO have a positive predictive relationship, self-esteem and FOMO have a negative predictive relationship. This chapter also discussed the results from the moderating effect of sex on the relationship between self-esteem and FOMO, as well as that of loneliness and FOMO. The relationship between self-esteem and FOMO is significantly moderated by sex. The relationship between loneliness and FOMO, on the other hand, is not significantly moderated by sex.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The summary, conclusion, and recommendations are all included in this chapter. The summary section aims to establish the approaches employed in this study.

Overview

Primarily, the study aimed to investigate the prevalence and predictors of FOMO among university students in Ghana. Additionally, it examined the role of sex in moderating the relationship between FOMO and the predictors (self-esteem and loneliness). A cross-sectional descriptive survey design was used in the methodology, under the quantitative approach. For the study, 442 respondents were chosen using the convenience sampling technique. The University of Cape Coast's Institutional Review Board gave permission to carry out the study. The study was guided by four hypotheses and three research questions. Data from the respondents was gathered via questionnaires. Descriptive statistics were used to analyse the demographic data that was gathered. Additionally, frequencies and percentages were used to answer the research questions. An alpha level of .05 and a confidence interval of 95% were used to test each hypothesis. A simple linear regression analysis was used to test hypotheses one and two. Using Hayes Process Macro, moderation analysis was carried out for hypotheses three and four.

Summary of Key Findings

The following were the key findings of this study:

1. The study revealed that FOMO was prevalent in moderate and low levels among university students.
2. Self-esteem was high in more than half of the students, and a substantial number also have medium or low self-esteem.
3. Loneliness was found to be moderately high among the majority of university students.
4. The study indicated that self-esteem significantly predicted FOMO among university students in Ghana.
5. Loneliness significantly predicted FOMO among university students in Ghana.
6. The relationship between self-esteem and FOMO was found to be significantly moderated by sex. Specifically, females are more inclined to have their self-esteem as an indicator for FOMO.
7. The moderation effect of sex on the relationship between loneliness and FOMO was not significant.

Conclusions

The results of the study show that FOMO exists at low to moderate levels among university students in Ghana, which is a clear sign that something needs to be done before it becomes a bigger issue. While a majority of the students reported high self-esteem, a good number still fell into the medium or low range. Loneliness, on the other hand, was more common, with most students experiencing it at moderately high levels. The study also found that both self-esteem and loneliness could predict the level of FOMO students

felt. Additionally, sex played a role in how self-esteem and FOMO were connected, but it did not significantly affect the relationship between loneliness and FOMO.

These findings really underline the need to pay attention to issues like low self-esteem, which can be improved through self-awareness and activities that help build confidence. Tackling loneliness by encouraging meaningful social connections and emotional support is also key. Overall, this study makes it clear that we need more research to better understand FOMO, especially in the university setting and to develop strategies that can help students manage the anxiety that often comes with it.

Recommendations

These recommendations are tailored to the NCA, the clinical community and educational institutions:

National Communications Authority (NCA)

I recommend that as part of the interventions to mitigate FOMO, NCA should collaborate with educational institutions and mental health experts to develop and implement public awareness campaigns regarding responsible and balanced use of technology, including social media. Guidelines must be provided for healthy digital engagement, emphasizing the importance of digital literacy and self-regulation in managing FOMO.

Also, allocation of resources to support mental health initiatives that address digital technology's effects on mental health, particularly for university students must be facilitated. Funding and partnerships can help establish mental health services that address FOMO and its related stressors.

Ghana Psychology Council (GPC)

The GPC should integrate FOMO related topics into seminars and CPD programs to ensure that mental health professionals are well-equipped to understand and address FOMO in their practice.

The council should offer specialized mental health services within universities that specifically address FOMO and related mental health challenges. Ensure that mental health professionals are well-versed in FOMO and its impact on students.

Educational Institutions

To start off, universities should prioritize mental health education and support programs. Students should be desensitized on the psychological effects of excessive social media use and the value of fostering a positive sense of self. A collaboration with the Ghana Psychology Council can be made to ensure the effectiveness and efficiency of the suggested support programs.

I recommend that universities create peer support and mentorship programs that encourage students to connect with and support one another. Peers can play a critical role in helping their fellow students cope with FOMO and feelings of loneliness.

These recommendations aim to address the growing concern of FOMO among university students in Ghana by fostering responsible technology use, promoting mental well-being, and creating a supportive environment within educational institutions. Collaborative efforts between regulatory authorities, mental health experts, and educational institutions are essential to mitigating the negative impact of FOMO and its predictors on students' lives.

Suggestion for further research

In order to obtain a more comprehensive understanding of students' individual experiences with FOMO, self-esteem, and loneliness, future research can take a qualitative approach, utilizing focus groups or in-depth interviews. This can provide valuable context to quantitative findings.

Additionally, research can contrast the frequency and contributing factors of FOMO in college students from various cultural backgrounds and regions within Ghana. This can shed light on the impact of cultural diversity on FOMO.

I suggest further studies focus on assessing the effectiveness of intervention programs designed to alleviate FOMO by targeting self-esteem and loneliness. Investigate the effect of such programs on the wellbeing of students.

These research suggestions aim to expand our knowledge of FOMO, self-esteem and loneliness among university students. By exploring these areas, researchers can assist in the creation of supportive systems and interventions that effectively address the well-being of this demographic in Ghana and beyond.

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APPENDICES**APPENDIX A****RESEARCH QUESTIONNAIRE**

Dear Respondent,

I am Robert Castro Cudjoe, an MPhil. Clinical Health Psychology student at the University of Cape Coast (UCC). This survey seeks to gather information on the Prevalence and Predictors of Fear of Missing Out among University Students in Ghana. Your participation in this research is significant in advancing clinical knowledge and literature. I would be grateful if you could provide honest responses to the items in the questionnaire. This survey is solely voluntary, and respondents can stop at any point in time. Please be assured that responses will be kept highly confidential and respondents anonymous. The questionnaire should take 10-15 minutes to complete and does not pose any possible risk or danger to the respondents. Please tick the responses that are applicable to you.

Thank you.

SECTION A: DEMOGRAPHIC INFORMATION**1. SEX:**

MALE [] **FEMALE** []

SECTION B: FOMO SCALE

Below is a collection of statements about your everyday experience. Using the scale provided please indicate how true each statement is of your general experiences. Please answer according to what really reflects your experiences rather than what you think your experiences should be.

Please treat each item separately from every other item. **1 = “Not at all true of me”, 2 = “Slightly true of me”, 3 = “Moderately true of me”, 4 = “Very true of me”, and 5 = “Extremely true of me”.**

S/N	STATEMENTS	1	2	3	4	5
1	I fear others have more rewarding experiences than me.					
2	I fear my friends have more rewarding experiences than me.					
3	I get worried when I find out my friends are having fun without me.					
4	I get anxious when I don't know what my friends are up to.					
5	It is important that I understand my friends “in jokes”. (New trends)					
6	Sometimes, I wonder if I spend too much time keeping up with what is going on. (Spending time on social media)					
7	It bothers me when I miss an opportunity to meet up with friends.					

8	When I have a good time, it is important for me to share the details online (e.g. updating status).					
9	When I miss out on a planned get-together, it bothers me.					
10	When I go on vacation (travel/tour), I continue to keep tabs on what my friends are doing.					

SECTION C: UCLA Loneliness Scale

INSTRUCTIONS: Indicate how often each of the statements below is descriptive of you.

Statement: 1=Never, 2=Rarely, 3=Sometimes, 4=Often

*1. How often do you feel that you are "in tune" with the people around you?

S/N	STATEMENTS	1	2	3	4
1	How often do you feel that you are "in tune" with the people around you?				
2	How often do you feel that you lack companionship?				
3	How often do you feel that there is no one you can turn to?				
4	How often do you feel alone?				

5	How often do you feel part of a group of friends?				
6	How often do you feel that you have a lot in common with the people around you?				
7	How often do you feel that you are no longer close to anyone?				
8	How often do you feel that your interests and ideas are not shared by those around you?				
9	How often do you feel outgoing and friendly?				
10	How often do you feel close to people?				
11	How often do you feel left out?				
12	How often do you feel that your relationships with others are not meaningful?				
13	How often do you feel that no one really knows you well?				
14	How often do you feel isolated from others?				
15	How often do you feel you can find companionship when you want it?				

16	How often do you feel that there are people who really understand you?				
17	How often do you feel shy?				
18	How often do you feel that people are around you but not with you?				
19	How often do you feel that there are people you can talk to?				
20	How often do you feel that there are people you can turn to?				

SECTION D: ROSENBERG SELF-ESTEEM SCALE

Instructions

Below is a list of statements dealing with your general feelings about yourself.

Please

Indicate how strongly you agree or disagree with each statement.

1=Strongly Disagree, 2=Disagree Agree, 3=Agree, 4= Strongly

S/N	STATEMENT	1	2	3	4
1	On the whole, I am satisfied with myself.				
2	At times I think I am no good at all.				
3	I feel that I have a number of good qualities.				

4	I am able to do things as well as most other people.				
5	I feel I do not have much to be proud of.				
6	I certainly feel useless at times.				
7	I feel that I'm a person of worth, at least on an equal plane with others.				
8	I wish I could have more respect for myself.				
9	All in all, I am inclined to feel that I am a failure.				
10	I take a positive attitude toward myself.				

APPENDIX B

INTRODUCTORY LETTER

UNIVERSITY OF CAPE COAST

COLLEGE OF EDUCATION STUDIES

FACULTY OF EDUCATIONAL FOUNDATIONS

DEPARTMENT OF EDUCATION AND PSYCHOLOGY

Telephone: 03320-91697
Email: depu@ucc.edu.gh



UNIVERSITY POST OFFICE
CAPE COAST, GHANA

Our Ref:

15th June, 2023

Your Ref:

Dear Sir/Madam,

LETTER OF INTRODUCTION – MR. ROBERT CASTRO CUDJOE

We introduce to you Mr. Robert Castro Cudjoe, a student with registration number EF/CHP/21/0008 from the University of Cape Coast, Department of Education and Psychology. He is pursuing a Master of Philosophy degree in Clinical Health Psychology, and he is currently at the thesis stage.

Mr. Castro Cudjoe is researching on the topic: **“PREVALENCE AND PREDICTORS OF FEAR OF MISSING OUT AMONG UNIVERSITY STUDENTS IN GHANA.”**

He has opted to collect or gather data at your institution/establishment for his thesis work. We would be most grateful if you could provide him with the opportunity and assistance for the study. Any information provided would be treated strictly as confidential.

We sincerely appreciate your cooperation and assistance in this direction.

Thank you.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Mark O. Amponsah', written over a horizontal line.

Prof. Mark O. Amponsah
HEAD


APPENDIX C

ETHICAL CLARANCE

**UNIVERSITY OF CAPE COAST
COLLEGE OF EDUCATION STUDIES
ETHICAL REVIEW BOARD**

Our Ref: CES/ERB/colled/108-23/172

Your Ref: _____

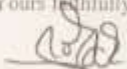


UNIVERSITY POST OFFICER
CAPE COAST, GHANA

Date: 17th August 2023

Dear Sir/Madam,

ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY

<p><i>Chairman CES-ERB</i> Prof. J. O. Omonasha <u>jomonasha@ucc.edu.gh</u> 0243784739</p> <p><i>Vice Chairman CES-ERB</i> Prof. K. Edjah <u>kedjah@ucc.edu.gh</u> 0244742357</p> <p><i>Secretary CES-ERB</i> Prof. Linda Dzama Forde <u>lforde@ucc.edu.gh</u> 0244786680</p>	<p>The bearer, <u>Robert Koko Tadjoe</u></p> <p>Reg. No. <u>EF/CHP/21/1008</u></p> <p>M.Phil/Ph.D student in the Department of <u>Education and Psychology</u> in the College of Education Studies, University of Cape Coast, Cape Coast, Ghana. He/She wishes to Undertake of research study on the topic:</p> <p><u>Prevalence and predictors of fear of missing out among University students in Ghana</u></p> <p>The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed his/her proposal and confirmed that the proposal satisfies the College's ethical requirements for the conduct of the study.</p> <p>In view of the above, the researcher has been cleared and given approval to commence his/her study. The ERB would be grateful if you would give him/her the necessary assistance to facilitate the conduct of the said research.</p> <p style="text-align: center;">Thank You: IS</p> <p>Yours faithfully,</p> <div style="text-align: center;">  Prof. Linda Dzama Forde (Secretary, CES-ERB) </div>
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