Digital Addictions & Compensatory Consumption: Exploring the Mediating roles of phubbing and Loneliness on Shopping Escapism & Impulsive Buying

By:

Iqra Afrahim ***01-321242-011***

MBA

Supervisor:

Dr. Muhammad Kasheer

HR and Management Department

Bahria University Islamabad

Fall 2025

Majors: MKT

S. No: M18

Digital Addictions & Compensatory Consumption: Exploring the Mediating roles of phubbing and Loneliness on Shopping Escapism & Impulsive Buying

By:

Iqra Afrahim ***01-321242-011***

Supervisor:

Dr. Muhammad Kasheer

HR and Management Department

Bahria University Islamabad

Fall 2025

FINAL PROJECT/THESIS APPROVAL SHEET

Open Defense Examination

Open Defense Date 13/ 1 / 2026

Topic of Research: Digital Addictions & Compensatory Consumption: The Mediating roles of Phubbing & Loneliness on Shopping Escapism & Impulsive Buying.

Name of Student: Iqra Afrahim Enroll # 01-321242-011

Class: MBA

Approved by:

_____

(Dr. Muhammad Kasheer)

Supervisor

_____

Qurat Ul Ain Waqar

Research Coordinator

_____

Dr. Aftab Haider

Head of Department

ACKNOWLEDGMENT

I would like to express my sincere and heartfelt gratitude to all those who supported me throughout my MBA journey. First and foremost, I extend my deepest respect and gratitude to my supervisor, Dr. Kasheer, for his invaluable guidance, continuous support, constructive feedback, and scholarly mentorship. His insightful supervision and academic rigor played a pivotal role in shaping this research and bringing it to successful completion.

I am profoundly thankful to my husband, whose unwavering patience, emotional strength, sacrifices, and constant belief in me provided stability and encouragement during challenging times. His support gave me the confidence and determination to move forward with resilience.

I also lovingly acknowledge my children, whose presence, smiles, and innocence became a continuous source of motivation, hope, and inner strength. Even during moments of exhaustion and responsibility, their love inspired me to persevere and remain focused on my goals.

Finally, I extend my appreciation to everyone who contributed directly or indirectly to the completion of this research. Their support and encouragement are sincerely valued.

ABSTRACT

The rapid growth of smartphones and social media has changed how people communicate and shop, but it has also created new behavioral and emotional challenges. Many individuals now spend excessive time on their phones, which often leads to phubbing, the act of ignoring people in face-to-face interactions to focus on a smartphone. While earlier studies have examined digital addiction and phubbing separately, limited research has explained how these behaviors lead to emotional distress and later influence consumer buying behavior.

This study aims to examine how digital addictions, including smartphone addiction, social media addiction, and fear of missing out (FoMO), lead to compensatory consumption behaviors through phubbing and loneliness. Grounded in Compensatory Consumption Theory, the study proposes a sequential model linking digital overuse to shopping escapism and impulsive buying.

A quantitative, cross-sectional research design was used. Data were collected through a structured questionnaire from young adults in Pakistan who actively use smartphones and social media. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test direct, mediating, and sequential relationships among the variables.

The findings reveal that smartphone addiction and FoMO significantly increase phubbing behavior, while social media addiction does not show a direct effect. Phubbing was found to significantly increase loneliness, which in turn leads to higher levels of shopping escapism and impulsive buying. The mediation analysis confirms that loneliness plays a key role in translating phubbing into compensatory consumption behaviors. The results also support a sequential mediation process, showing that digital addictions influence shopping behavior through phubbing and loneliness.

This study contributes to theory by extending Compensatory Consumption Theory to the digital context and introducing phubbing as a key antecedent of emotional distress and consumer behavior. Practically, the findings highlight the need for balanced digital use to reduce loneliness and promote healthier consumption patterns among consumers.

Keywords:

Digital Addiction; Smartphone Addiction; Fear of Missing Out (FoMO); Phubbing; Loneliness; Shopping Escapism; Impulsive Buying; Compensatory Consumption Theory

TABLE OF CONTENTS

FINAL PROJECT/THESIS APPROVAL SHEET IV

ACKNOWLEDGMENT V

ABSTRACT VI

LIST OF ABBREVIATION 11

CHAPTER 1 12

1.1 Introduction 12
1.2 Problem Statement 14
1.3 Research Gap: The missing chain 15
1.4 Research Questions 15
1.6 The Core Research Purpose 16
1.7 SIGNIFICANCE OF STUDY 16

CHAPTER 2 18

LITERATURE REVIEW 18

2.1. Introduction 18
2.2 SMARTPHONE ADDICTION 19
2.3 Social Media Addiction 20
2.4 Fear of Missing Out (FoMO) 22
2.5 Phubbing 24
2.5.1 Smartphone Addiction and Phubbing 25
2.5.2 Social Media Addiction and Phubbing 25
2.5.3 FoMO and Phubbing 25
2.5.4. Phubbing and Buying Things to Make Up for It 25
2.6 Loneliness 25
2.7 Shopping Escapism 27
2.8 Impulsive Buying 28
2.9 The Mediating Role of Loneliness between Phubbing and Shopping Escapism 30
2.10 The Mediating Role of Loneliness between Phubbing and Impulsive Buying 31
2.11 The Underpinning Theory 34

CHAPTER 3 37

RESEARCH METHODOLOGY 37

3.1 Introduction 37
3.2 Research Design 37
3.3 Research Approach 37
3.4 Population of the Study 37
3.5 Sampling Technique 38
3.6 Sample Size 38
3.7 Data Collection Procedure 38
3.8 Research Instrument 39
3.8.1 Section A: Demographic Information 39

3.8.2 SECTION B: STUDY VARIABLES 39
3.9 MEASUREMENT SCALES 39
3.9.1 Smartphone addiction 39
3.9.2 Social Media Addiction 40
3.9.3 Fear of Missing Out (FoMO) 40
3.9.4 Phubbing 40
3.9.5 Loneliness 40
3.9.6 Shopping Escapism 41
3.9.7 Impulsive Buying 41
3.10 DATA PREPARATION AND SCREENING SCALE 43

CHAPTER 4 44

FINDINGS AND ANALYSIS 44

4.1 INTRODUCTION 44
4.2 DEMOGRAPHICS DATA 44
4.3 STRUCTURAL EQUATION MODELING 49
4.4 MEASUREMENT MODEL 49
4.4.1. RELIABILITY AND VALIDITY 49
4.5 PLS-SEM MODEL 52
4.6 DISCRIMINANT VALIITY 53
4.6.1 DISCRIMINANT VALIDITY 53
4.6.2 COLLINEARITY ASSESSMENT 54
4.7 HTMT RATIO 55
4.8 STRUCTURAL MODEL 55
4.9 HYPOTHESIS TESTING 56
4.10 HYPOTHESIS SUPPORT SUMMARY 57
4.11 MEDIATION 57

CHAPTER 5 59

DISCUSSION AND RECOMMENDATIONS 59

5.1 INTRODUCTION 59
5.2 DIGITAL ADDICTION & PHUBBING 59
5.2 PHUBBING AND LONELINESS 60
5.5 MEDIATING ROLE OF LONELINESS 60
5.6 SEQUENTIAL MEDIATION OF PHUBBING AND LONELINESS 61
5.7 THEORETICAL CONTRIBUTIONS 61
6. FUTURE IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSION 61
6.1.1 PRACTICAL IMPLICATIONS 61
6.1.2 MANAGERIAL IMPLICATIONS 62
6.2 LIMITATIONS OF THE STUDY 62
6.3 FUTURE RESEARCH DIRECTIONS 62
6.4 CONCLUSION 63

REFERENCES 64

TABLE OF TABLES

TABLE 1 VARIABLE CONTRIBUTION TO CURRENT MODEL 34

TABLE 2 - MAPPING OF COMPENSATORY CONSUMPTION THEORY 35

TABLE 3 MODEL SUMMARY CHAIN FORMAT 36

TABLE 4 SOCIAL MEDIA ADDICTION SCALE 41

TABLE 5 SMART PHONE ADDICTION SCALE 41

TABLE 6 FOMO SCALE 42

TABLE 7 PHUBBING SCALE 42

TABLE 8 LONLINESS SCALE 42

TABLE 9 SHOPPING ESCAPISM SCALE 42

TABLE 10 IMPULSIVE BUYING 42

TABLE 11 GENDER 44

TABLE 12 EDUCATION 45

TABLE 13 SOCIAL MEDIA USE HOURS 45

TABLE 14 AGE 46

TABLE 15 INDICATOR LOADINGS 50,51,52

TABLE 16 CRONBACH'S ALPHA AND COMPOSITE RELIABILITY VALUES 52

TABLE 17 DISCRIMINANT VALIDITY 54

TABLE 18 COLLINEARITY ASSESSMENT (VIF) 54

TABLE 19 HTMT 55

TABLE 20 DIRECT EFFECTS AND HYPOTHESIS TESTING 56

TABLE 21 HYPOTHESIS SUPPORT SUMMARY 57

TABLE 22 MEDIATION ANALYSIS 57

TABLE OF FIGURES

FIGURE 1 THEORETICAL FRAMEWORK 36
FIGURE 2 PLS-SEM MODEL 52
FIGURE 3 STRUCTURAL MODEL 55

APPENDIX A: RESEARCH QUESTIONNAIRE 71

SECTION A: DEMOGRAPHIC INFORMATION 71
SECTION B: SOCIAL MEDIA ADDICTION 72
SECTION C: SMARTPHONE ADDICTION 72
SECTION D: FEAR OF MISSING OUT (FOMO) 73
SECTION E: PHUBBING BEHAVIOR 74
SECTION F: LONELINESS 74
SECTION G: SHOPPING ESCAPISM 75
SECTION H: IMPULSIVE BUYING 75

List of Abbreviation

Abbreviation	Full Form
AVE	Average Variance Extracted
β	Beta Coefficient
CR	Composite Reliability
ESCP	Shopping Escapism
FoMO / FOMO	Fear of Missing Out
HTMT	Heterotrait–Monotrait Ratio
IB	Impulsive Buying
LON	Loneliness
PLS	Partial Least Squares
PLS-SEM	Partial Least Squares Structural Equation Modeling
PHBN	Phubbing
Q^2	Predictive Relevance
R^2	Coefficient of Determination
SMA	Social Media Addiction
SPA	Smartphone Addiction
SPSS	Statistical Package for the Social Sciences
VIF	Variance Inflation Factor

CHAPTER 1

INTRODUCTION

1.1 Introduction

Today, smartphones and social media are big part of life, but they can cause problems like spending too much time on devices and feeling disconnected from others. This study explores how digital addictions, like being hooked on smartphones, social media, or Fear of Missing out (FoMO), might lead to shopping behaviors such as shopping escapism & impulsive buying. These shopping habits may come from feeling lonely, which can be caused by phubbing, ignoring people to focus on your phone. On the bases of Compensatory Consumption Theory, this study seems to indicate how loneliness and phubbing function as links between digital addictions and shopping behaviors. The discussion starts with an exploration of shopping behaviors concluded by an examination of the digital habits contributing to them.

Shopping escapism takes place when people shop to get away from negative feelings, like stress or sadness (Mandini & Furchheim, 2025). Impulsive buying is when someone suddenly buys something without planning & often to feel good right away (Mandini & Furchheim,2025). Both behaviors are common and can offended people's finances and emotions. Research shows that lonely people often shop to feel better. Using buying or shopping as a way to fill an emotional gap (Mendini & Furchheim, 2025). A study found that loneliness makes people more materialistic. This leading them to shop to escape or buy impulsively (Mendini & Furchheim, 2025). This idea fits with compensatory consumption theory, which says people buy things to make up for emotional or social problems (Mandel et al., 2017).

Shopping escapism takes place when people shop to get away from negative feelings, like stress or sadness (Mendini & Furchheim, 2025). Impulsive buying is when you buy anything without thinking about it first. In other words, buying anything on impulse involves making a decision to buy something without planning it. Retailers are trying to turn those who are only looking into people who buy things with the help of different in-store influencers. Since the 1950s, researchers have been trying to figure out what impulsive buying is in the field of consumer research. When

you find something you like at a store and buy it without planning, that's called "impulsive buying." Impulsive purchasing is caused by internal motivation. People who buy things on a whim are likely to not think about what they're doing, be emotionally drawn to the item, and want instant satisfaction (Hoch & Loewenstein, 1991; Thompson et al., 1990). These consumers frequently disregard potential adverse outcomes stemming from their activities (Hoch & Loewenstein, 1991; Rook, 1987; O'Guinn & Faber, 1989). Both behaviors are common and can offend people's finances and emotions. Research shows that lonely people often shop to feel better. Using buying or shopping as a way to fill an emotional gap (Mendini & Furchheim, 2025). A study found that loneliness makes people more materialistic, which leads them to shop to escape or buy impulsively (Mendini & Furchheim, 2025). This idea fits with compensatory consumption theory, which suggests that people buy things to make up for emotional or social problems (Mandel et al., 2017).

Loneliness is a distress feeling of sadness because one has no friend, no family or a company whom he can share the life enjoyable movements and this loneliness in the context of this research basically push the people toward going into the mall and going for the shopping and even on the online shopping and just to cope with the feeling and the individual with loneliness they are more likely to purchase things just to overcome on this feeling and to feel better that leads to shopping escapism and impulsive buying. (Mendini & Furchheim, 2025).

Moreover, Mishra et al. (2025) concluded that behaviors such as phubbing can lead to social disconnection, which in turn results in loneliness.

Phubbing indirectly influences consumption habits. This study presents loneliness as a key link that connects the emotional effects of phone use to shopping habits. Compensatory consumption theory recommends that consumption serves as mechanism to address psychological distress by loneliness. people buy to cope with loneliness (Mandel et Al., 2017)

Phubbing is the act of snubbing someone in favor of using a smartphone, like checking social media during a conversation. This can make people feel left out and lonely. Phubbing, a novel study concept characterized by its antisocial nature, has become the focus of a growing body of studies investigating its detrimental effects on social communication patterns and interpersonal relationships. Prior research indicated a substantial negative correlation between phubbing and life satisfaction; however, these findings are derived from the experiences of the phubber rather than

the individual being phubbed. Roberts and David posited that partner phubbing exerted a substantial, direct adverse effect on relationship satisfaction and an indirect influence on life satisfaction and depression. Additionally, analogous studies investigating the effects of phubbing in partnerships indicated that prevalent results may include heightened jealousy, depressed symptoms, and diminished relationship satisfaction. The study involved 720 adults in Romania, showed that loneliness partly explains how phubbing affects face to face interactions and exacerbates the feeling of loneliness (Maftei & Mairean, 2023). By focusing on phones instead of people, phubbing can harm relationships and make loneliness worse, which is a key part of this study's model.

The starting points that might lead to phubbing are smartphone addiction and social media addiction, and FoMO. In more precise detail, people with smartphone addiction cannot give up using their phones; in case of social media addiction, this involves an overuse of specific apps like Instagram or Twitter; and lastly, FoMO is related to the worries of an individual regarding not receiving important news or events occurring online. Smartphone and social media addiction strongly lead to phubbing, whereby individuals in interaction get distracted by their devices. Talan, Dogan, & Kalinkara showed this in a sample of 208 University students in Turkey. The researchers found that those addictions explained much of phubbing, though FoMO did not show a strong link. However, FoMO has been included here since it can drive individuals to check their phones constantly, thereby providing them with possibilities leading to phubbing.

Compensatory consumption theory explains why people might stop feeling better when they are struggling emotionally or socially (Mandel et Al., 2017). In this study theory suggests that digital addictions cause phubbing, which leads to loneliness, and then people shop to cope with that loneliness, The chain starts with phone overuse, ignoring others, feelings of loneliness, and ends with shopping escapism and impulsive buying ultimately.

1.2 Problem Statement

Numerous studies have concentrated on phubbing, mostly examining its origins, including smartphone addiction, social media addiction and fear of missing out (FoMO), along with its direct impacts on relationships (Talan et al., 2024). On the other hand, few researchers have gone further to look into exactly what happens after phubbing, especially how it leads to loneliness and then causes shopping escapism and impulsive buying.

The research shows a clear gap. People now use their phones more in social settings, which leads to phubbing. When someone feels ignored, they often feel lonely. This loneliness leads people to cope with this in different ways that are detrimental to their health. Some turn to shopping to escape their feelings. Others buy things without planning. These habits can cause money problems and lead to wasteful consumption (Mendini & Furchheim, 2025).

1.3 Research Gap: The missing chain

Past studies usually look at these factors one at a time. For example, research shows that digital addiction increases phubbing behaviors (Talan et al., 2024). Other studies show that phubbing makes people feel lonely (Maftei & Mairean). There is limited work linking loneliness to compensatory buying behaviors and later financial stress. This link has been addressed in this study. (Maftei & Mairean). Loneliness can trigger shopping escapism and impulsive buying (Mendini & Furchheim). No study has connected these three streams and none of them examine the full pathway: Digital Addiction to shopping escapism and impulsive buying. This gap limits our understanding of how digital behavior led to emotional distress and ultimately shape shopping behavior and financial wellbeing. This missing link, the role of phubbing and loneliness as drivers of financial distress, is the core problem, this research addresses. Without understanding this full chain, our efforts to fix digital overuse or compulsive spending will not be effective.

Importantly, phubbing has never been discussed in the context of compensatory consumption or purchasing behavior before, this study is among the first to explore this connection.

1.4 Research Questions

The study aims to answer the following research question:

1. What effect does smartphone addiction have on shopping as a way to escape and buying things on impulse?

2. What is the mediating role of phubbing between digital addiction and compensatory consumption?

3. What is the impact of loneliness on the relationship between digital addictions and impulsive buying or shopping escapism?

1.5 Purpose and Goal

The principal objective of this study is to enhance the phubbing model put forth by Talan et al. (2024) by investigating the mediating role of phubbing and loneliness on shopping escapism and impulsive purchasing behavior.

1. To investigate the impact of smartphone addiction and social media addiction, and FoMO on phubbing behavior.
2. To investigate the meditating role of loneliness between phubbing and compensatory consumption behaviors.

1.5 Research Aim and Objectives

1. To examine the role of smartphone addiction, social media addiction, and FoMO on phubbing behavior.
2. To investigate if phubbing serves as a mediator in the relationship between digital addictions and loneliness.
3. To evaluate the impact of phubbing on individuals' perceptions of loneliness.
4. To investigate if loneliness serves as a mediating variable in the relationship between phubbing and compensatory consumption behaviors, such as shopping escapism and impulsive buying.
5. To assess the direct impacts of loneliness on shopping escapism and impulsive purchasing as compensatory emotional reactions.
6. To test the whole path that the model suggests: Digital Addictions → Phubbing → Loneliness → Shopping Escapism & Impulsive Buying.

1.6 The Core Research Purpose

The core purpose of research is to develop and test a complete, integrated model that explains the behavioral pathway from digital overuse to consumption behavior. How digital habits lead to shopping behaviors. Measuring the mediating role of phubbing and loneliness on shopping escapism and impulsive buying.

1.7 Significance of study

Results can be used by marketers, consumer behavior specialist, psychologists, or policy-makers to design awareness campaigns, reduce addictive behavior, and improve online consumer well-being. Marketing managers understand how digital behavior affects consumer spending.

Businesses design better marketing campaigns that avoid triggering addictive or impulsive buying patterns.

This model focuses on general consumers, but same model can be tested inside a specific company to see how digital addiction affects that organization's customers.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

Digital media has revolutionized all the aspects of human life from social communication, to buying patterns and overall wellbeing of human lifestyle. Like anything in access is considered bad, similarly frequent use of smart phones, and pervasive social media handles and other online facilities, has raised concerns regarding digital addiction, phubbing, social disconnection, and compensatory consumption behaviors such as shopping escapism and impulsive buying.

Literature reviews of all past studies show that too much dependency on mobile phones has made us paralyzed to use these to escape stress, regulate emotions, and compensate for unmet psychological needs (Krefeld-Winther, 2014; Kuss & Griffiths, 2017).

The theoretical model of this study includes following variables.

- Smartphone Addiction
- Social Media Addiction
- FoMO
- Phubbing
- Loneliness
- Shopping Escapism
- Impulsive Buying

The underpinning theory of Compensatory Consumption Theory is used as the based theory to explain the theoretical background and logic of the theoretical framework.

2.2 Smartphone Addiction

Excessive supply and availability of smartphones have transformed daily life, offering constant connectivity, convenience, and access to diverse applications (Haug et al., 2015; Roberts, Yaya, & Manolis, 2014; Talan, Doğan, & Kalinkara, 2023).

Among the numerous benefits of using smartphones, there is no discipline available to control the excessive use of smartphone that ultimately lead to behavioral problems and psychological issues including smartphone addictions. Smartphone addiction can be understood by compulsive checking habits, preoccupation with the device, withdrawal symptoms, emotional dependence, and disruption of daily routines (Cha & Seo, 2018; Nayak, 2018).

Mobile addicted persons experience psychological discomfort when separated from their phones, often showing different disturbing signs of anxiety, restlessness, and an inability to avoid from checking messages or social media feeds and updates (Özata, 2019). This way, smartphone addiction negatively impacts physical health, mental well-being, and social functioning (Meral, 2017).

A substantial body of evidence indicates that smartphone addiction significantly predicts phubbing behavior. Individuals with mobile phone addiction are more likely to disengage from face-to-face interactions in favor of using their phones (Davey et al., 2018; Karadağ et al., 2015, 2016). Previous studies have identified a positive correlation between smartphone addiction and phubbing, suggesting that phubbing may constitute a manifestation—or even a subdimension—of smartphone addiction (Blanca & Bendayan, 2018; Pirinçci, Karaçorlu, & Kaya, 2019; Büyükgebiz Koca, 2019).Therefore, checking this relation of how smartphone addiction drives phubbing is critical for understanding the social consequences of excessive digital dependence.

Smartphone addiction means to use the mobile phone in the excessive and uncontrollable use of smartphones that interferes with daily functioning (Lin et al., 2016). It is characterized by:

- Compulsive and frequent checking
- Showing Anxiety when disconnected
- Similar to Withdrawal-like symptoms
- Low productivity

Research shows that smartphone addiction predicts weaker social interactions, increased isolation, and disorder in online behaviors (Elhai et al., 2017; Panova & Carbonell, 2018). Since mobile phones enable always-on connectivity, they become go to tools for emotional regulation, distraction, and escapism.

As technology has improved, smartphones have become a big part of our life. Because the internet, apps, and social media are so easy to use, people are on their phones all day (Haug et al., 2015; Roberts et al., 2014). People who are addicted to their smartphones feel like they have to check them all the time. Smartphone addiction is when people use their phones too muc and not for practical reasons (Oulasvirta et al., 2012). They frequently interact with their screens right after waking and exhibit anxiety, irritation, or tension when their phone usage is limited (Cha & Seo, 2018; Nayak, 2018). The people in the cabins who are constantly engrossed in their mobile devices often ignore their family and friends. This behavior pattern negatively impacts their psychological well-being, social relationships, and daily life. A careful review of the literature reveals that this level of smartphone addiction is the root cause of 'phubbing' behavior. Those who are dependent on their mobile phones find it difficult to stop chatting with others digitally. Indeed, many researchers suggest that phubbing is a primary symptom of cellphone addiction.

2.3 Social Media Addiction

Social media platforms like Instagram, YouTube, TikTok, WhatsApp, Facebook, and Twitter have become major tools for communication, self-promotion, information sharing, entertainment, and social interaction via user-generated content (Kırcaburun, 2016; Nalwa & Anand, 2003). However, too much, frequent, and prolonged use of these platforms increases the risk of social media addiction.

Social media addiction is typically defined as frequent, intense use of social media applications that disrupts daily activities, personal obligations, and psychological well-being (Griffiths, 2013 Social media addiction links to emotional dependency, constant comparison with others, mood changes, and lower life satisfaction (Tutgun Ünal, 2015). As people use mobile phones more often, they may face communication problems, sleep issues, academic stress, and other health concerns.

Many past studies show a strong connection between social media addiction and phubbing. When people spend too much time on social media, they tend to check their feeds and notifications even while talking to others. This habit increases phubbing behavior (Ünalan & Yıldırım, 2020). Research also shows that social media dependence is one of the main predictors of phubbing (Karadağ et al., 2015, 2016; Büyükgebiz Koca, 2019). Studies provide clear evidence that higher social media use directly increases how often people engage in phubbing (Blanca & Bendayan, 2018; İlhan, 2020). Hence, understanding how social media addiction increases phubbing is essential for explaining the broader social consequences of digital communication patterns.

Social media addiction is defined as compelling, excessive use of social media platform that disorders social, academic, and psychological functioning (Bányai et al., 2017). Social media sites provide immediate rewards (likes, comments, validation) that reinforce addictive patterns (Meshi, Tamir & Heekeren, 2015). Studies show that social media addiction grows:

- Emotional dependency of individuals
- Social difference
- Heightened Sensitivity to online feedback
- Avoidance of face-to-face interactions

These mechanisms directly contribute to phubbing and loneliness.

Social media addiction. It is now surging. With them Coming off. Uh, new social media platform including Instagram, YouTube, TikTok and WhatsApp and basically the people addicted to the social media, they are using these to talk with people to scroll through the fields to find the information and have fun. And expressing themselves on the social media as well. (Kırcaburun, 2016). academic pursuits, and personal life (Griffiths, 2013). Moreover, social media addiction has been associated with various mental health disorders, including chronic social comparison, an intensified craving for validation through likes and comments, fear of missing out (FoMO), mood instability, and poor time management (Tutgun Ünal, 2015).

The widespread use of smartphones that has emerged over the past century has undoubtedly seen numerous benefits; however, the convenience of smartphones and in turn, the rapidly growing

accessibility of the worldwide internet has not been without its problems. One specific phenomenon the widespread accessibility of smartphones has caused is phubbing, which refers to an individual's obsessive use of the smartphone instead of having interpersonal conversations with other individuals in a social setting (Karadağ et al., 2015). Phubbing has become normative in modern-day communication (Karadağ et al., 2015; Chotpitayasunondh & Douglas, 2018a) and has been cited to be at the intersection of many immediate issues on both an intrapersonal and interpersonal scale. Among them, numerous studies have found phubbing to be positively linked to social media addiction (Karadağ et al., 2015; Franchina et al., 2018; Błachnio & Przepiórka, 2019; Nazir & Bulut, 2019; Balta et al., 2020). Phubbing shown to be positively associated with other traits like the fear of missing out (FOMO) (Blanca & Bendayan, 2018; Davey et al., 2018; Franchina et al., 2018; Balta et al., 2020). Studies investigating the potential role of personality traits on phubbing behavior have also concluded that certain personalities serve as risk factors while others serve as protective factors for phubbing (Chotpitayasunondh & Douglas, 2018b).Individuals frequently to check social media platforms such as Instagram or TikTok during one to one interactions, which lead others to feel ignored or undervalued (Ünalan & Yıldırım, 2020). Supporting this view, multiple studies have identified social media dependency as a significant predictor of phubbing (Karadağ et al., 2015; İlhan, 2020).

2.4 Fear of Missing Out (FoMO)

FoMO is defined as the pervasive worry that others may be engaging in rewarding or important experiences from which one is absent (Przybylski et al., 2013). Initially FoMO was first studied in relation to consumer behavior, but as digital connectivity, flow of information, and social media usage have increased, it has gained importance (Hato, 2013).

People who have high levels of FOMO are always checking their social media accounts to stay up to date on feeds, news, events, life changes, and accomplishments. And this regular use of social media leads to more digital engagement, heightened social comparison, and compulsive habits of checking frequently (Hedges, 2014; Gezgin et al., 2019; Gökler et al., 2016). Current studies and research indicate that FoMO not only leads to excessive social media usage but also adversely affects mental health and academic performance (Al-Busaidi, Dauletova, & Al-Wahaibi, 2022; Milyavskaya et al., 2018). So, Phubbing is very closely related to FoMO. Consequently, the term "derived" refers to the behavior of those with elevated FoMO who incessantly check their

phones during social encounters to avoid missing updates from friends and acquaintances (Balta et al., 2020; Karadağ et al., 2015; Chotpitayasunondh & Douglas, 2016). Studies show that FoMO is a strong predictor of phubbing, either directly or indirectly (Franchina et al., 2018; Özdemir, 2021; Sepetçi, Özdemir, & Sever, 2021). Consequently, an in-depth comprehension of the psychological aspects affecting phubbing in digitally interconnected contexts can be attained by analyzing the role of FoMO.

Przybylski et al. (2013) characterize FOMO as the apprehension that an exhilarating or engaging event is transpiring elsewhere, often incited by social media updates. Increased use of smartphones; online social monitoring FoMO is a predictor of smartphone addiction, social media addiction, and phubbing, according to several research (Elhai et al., 2016; S The elevated use of this social media has not only affected the overall human psychology but it also affected the behavior pattern and the buying pattern of the consumer on the one hand the intense penetration is a good thing but on the other hand this intense penetration of the social media into the lives had very serious consequences (Wang et al. 2021) and day by day the use of the social media is increasing and causing the user to worry about the sharing the missing information and this missing information leads to the formation of psychological fear that is the formal FM Cambridge Dictionary (2020) says FOMO is also defined as kind of a state of anxiety that people faced when they're not aware of the fun and the excited events uh on the social media shared by their friends and family so according to the urban dictionary FOMO is defined as type of anxiety about not being aware of the value will experiences in society.

According to the Oxford Dictionary (2018), FoMO also is included as the anxiety about missing more interesting or exciting events on social media. On the other hand, FoMO was explained as the feeling of missing the life that others shared on social media and worth seeing, and it is stated that FoMO is associated with unhealthy social media use (Riordan et al. 2021). According to Blum (2016), FoMO is defined as seeing the photos of one’s friends on social media platforms, not seeing herself/himself in the photos and therefore feeling negative emotions. Based on these definitions, FoMO can be defined as the fear of not being able to follow what is going on in the lives of other people. This situation can push individuals to constantly visit social media platforms such as Facebook and Instagram. Therefore, people give more importance to social media applications and spend more time on them. Sapadin (2015) has stated that FoMO is mostly seen in

individuals who use social media extensively. The reason for this is that these individuals constantly follow what others are doing and sharing through social media. While individuals receive thousands of likes on social media; these people get much less likes. That's why it's very important what others do on an ongoing basis to people who are experiencing FoMO. Similarly, Erciş et al. (2021) have expressed FoMO as the anxiety of being aware of the magnificent experiences that another person may have.

Researchers have discovered that FoMO substantially exacerbates phubbing. These people are mentally preoccupied with the fear that they might miss an important "online moment" even when they are sitting in a group. This makes them check their phones all the time (Balta et al., 2020; Karadağ et al., 2015). Research indicates that FoMO affects phubbing both directly and indirectly (Franchina et al., 2018; Özdemir, 2021).

2.5 Phubbing

Phubbing is when someone ignores the people right in front of them to pay attention to their phone. In short, it is when someone is physically present with a group but keeps looking at their screen, checking messages, or scrolling through social media while the conversation is going on (Chotpitayasunondh & Douglas, 2016; Karadağ et al., 2015, 2016).

This kind of behavior is becoming more and more common in Pakistan. You will always see someone on their phone, whether they are at home, with friends, or even in class or a meeting. Researchers say that this is not just rude or careless; it really does break down social ties. Nazir and Pişkin (2016) say that when we stop talking to someone to look at a screen, they feel unimportant and undervalued. This is why many people see phubbing as a problem in society. Many believe phubbing happens because of smartphone addiction (Özdemir, 2020). When a person becomes addicted to their phone, self-control gets weaker. They feel the need to check their phone again and again. If this behavior continues, it can lead to misunderstandings, fights, and a lack of closeness in relationships (Karadağ et al., 2016). In everyday language, we can say that phubbing is when you are with someone in person but your mind is on your phone.

2.5.1 Smartphone Addiction and Phubbing

Empirical studies confirm that smartphone-addicted individuals phub more frequently because they have compulsive urges to check notifications and avoid disconnection (Davey et al., 2018; Roberts & David, 2016).

2.5.2 Social Media Addiction and Phubbing

People addicted to social media prioritize online interactions over offline social presence (Karadağ et al., 2015). This is leading them to ignore friends, colleagues, and partners to maintain online engagement.

2.5.3 FoMO and Phubbing

Individuals with high FoMO phub to stay constantly updated on social events and peer activities (Franchina et al., 2018). FoMO-driven checking behavior is one of the strongest predictors of phubbing.

2.5.4. Phubbing and Buying Things to Make Up for It

Excessive use of this smartphones lead to the new concept of this social tension and problem in relationships and emotional distress that basically prompt individuals to seek the other sources of the entertainment and the nearest one that the goes is shopping so when people feel segregated from their real and original relationship then they turn and goes to the online shopping as a way of escape mechanism (Mrad & Cui, 2020). so basically the heightened use of the mobile phone increases the amount of the time people spend on the digital slides that then the companies showed them the ads their promotions and also their influence by the social media influence this leads to the impulsive buying. (Chan et al., 2022).

2.6 Loneliness

Loneliness is commonly understood as a subjective psychological phenomenon that arises when individuals recognize a discrepancy between their desired social relationships and those they currently possess. In contrast to objective social isolation, loneliness signifies emotional distress arising from unfulfilled interpersonal needs and perceived inadequacies in social connectedness

(Huang et al., 2023). Recent studies indicate that loneliness has become more widespread in contemporary societies, influenced by factors such as digitalization, disjointed social frameworks, and changing lifestyles. These changes have made traditional social ties weaker, making loneliness an important psychosocial factor that has important effects on how people act as consumers (Fumagalli & Schuttelaar, 2022).

Empirical evidence consistently indicates that loneliness correlates with negative emotional states, such as sadness, emptiness, anxiety, and reduced self-esteem. Such emotional distress compromises psychological well-being and drives individuals to pursue coping mechanisms designed to reestablish emotional balance (Hawkley & Cacioppo, 2020). Loneliness is not merely a fleeting emotion; it frequently has a lasting impact on emotional regulation and self-perception, consequently influencing individuals' responses to emotional challenges in daily life.

Theoretically, Compensatory Consumption Theory offers a valuable framework for comprehending the behavioral ramifications of loneliness. The theory asserts that individuals partake in consumption behaviors to offset perceived psychological deficiencies, such as unfulfilled needs for belonging, control, or emotional satisfaction (Mandel et al., 2017). When social connections do not offer emotional support, individuals may seek material goods or consumption experiences that symbolically replace interpersonal relationships and temporarily restore emotional equilibrium or self-esteem (Rucker & Galinsky, 2016).

Recent empirical studies further substantiate the role of loneliness as a significant precursor to emotionally driven consumption. Studies show that lonely people are more likely to buy things to make themselves feel better, distract themselves, or improve their mood. This shows that they are trying to deal with their negative feelings through consumption (Huang et al., 2023). Loneliness has been demonstrated to diminish self-regulatory capacity, heightening vulnerability to impulsive decision-making and decreasing resistance to immediate gratification (Hawkley & Cacioppo, 2020). Consequently, loneliness has garnered increasing scholarly attention as a significant emotional catalyst for impulsive purchasing and other compensatory consumption behaviors in modern consumer contexts.

2.7 Shopping Escapism

Shopping escapism refers to the use of shopping as a psychological strategy to escape from negative emotions, stress, boredom, or emotional pain. Rather than fulfilling utilitarian needs, escapist shopping allows individuals to immerse themselves in the shopping process, thereby diverting attention away from distressing thoughts and emotional voids (Dittmar, 2005). Contemporary research suggests that shopping escapism is particularly appealing to lonely individuals because it provides temporary pleasure, perceived control, and emotional relief without requiring direct social interaction (Fumagalli & Schuttelaar, 2022).

Recent empirical evidence strongly supports the positive relationship between loneliness and shopping escapism. Studies conducted in online and offline consumption contexts indicate that lonely individuals are more likely to engage in recreational browsing, non-essential purchases, and hedonic shopping activities driven by emotional motives (Wang, 2023). Online shopping environments further intensify this relationship due to their accessibility, anonymity, and constant availability, making them especially attractive to individuals experiencing emotional loneliness (Chen et al., 2020; Saini et al., 2025). These environments reduce social judgment while offering immediate emotional stimulation, reinforcing shopping as a coping mechanism.

Loneliness has also been associated with reduced self-regulation and impaired emotional control. When individuals experience chronic loneliness, their ability to resist emotionally motivated behaviors weakens, increasing susceptibility to escapist consumption patterns (Baumeister & Vohs, 2021). Shopping, in this context, functions as a short-term mood regulation strategy that temporarily alleviates negative emotions but fails to address underlying social deficiencies (Thomas et al., 2024). As a result, lonely individuals may repeatedly rely on shopping escapism to manage emotional distress, leading to habitual consumption behaviors.

The Mood Regulation Theory further explains this relationship by suggesting that individuals actively engage in behaviors that enhance positive emotions or reduce negative affect (Gross, 2015). For lonely individuals, shopping triggers excitement, anticipation, and perceived self-reward, temporarily counteracting feelings of emptiness and social disconnection (Fumagalli & Schuttelaar, 2022). Material possessions may symbolically replace unmet social bonds, reinforcing

shopping escapism as an emotional coping strategy rather than a rational consumption decision (Belk, 1988).

Moreover, recent literature highlights that emotional loneliness has a stronger influence on escapist consumption compared to situational or temporary loneliness. Persistent emotional loneliness increases reliance on consumption-based coping strategies, particularly in digitally mediated shopping environments where personalized recommendations and targeted advertisements continuously promise emotional satisfaction (Huang et al., 2023; Mendini & Furchheim, 2025). This further strengthens the role of loneliness as a key antecedent of shopping escapism in contemporary consumer culture.

In summary, recent theoretical and empirical literature consistently demonstrates that loneliness plays a significant role in motivating shopping escapism. Individuals experiencing loneliness are more likely to engage in shopping behaviors aimed at emotional regulation, distraction, and temporary relief from social voids rather than functional need fulfillment. Shopping escapism emerges as a compensatory coping mechanism that alleviates emotional discomfort but does not resolve underlying loneliness. Based on this extensive support from recent literature, loneliness is expected to positively influence shopping escapism.

Therefore, it is hypothesized that:

H5: Loneliness positively influences shopping escapism.

2.8 Impulsive Buying

Impulsive buying refers to spontaneous, unplanned purchasing behavior driven primarily by emotional urges rather than rational evaluation of needs or consequences. Such purchases are typically accompanied by strong emotional arousal, immediate gratification, and limited cognitive deliberation (Verplanken & Sato, 2011). Recent studies suggest that impulsive buying frequently serves as a coping mechanism through which individuals attempt to regulate negative emotional states, including loneliness, stress, and emotional emptiness (Thomas et al., 2024).

From the perspective of Compensatory Consumption Theory, individuals engage in impulsive purchasing to compensate for psychological deficits such as lack of belongingness, emotional deprivation, or reduced self-worth (Mandel et al., 2017). When social connections fail to provide

emotional fulfillment, consumers may seek instant gratification through impulsive buying as a symbolic substitute for unmet social needs (Rucker & Galinsky, 2016). Recent empirical evidence indicates that lonely individuals are more likely to engage in impulsive buying due to heightened emotional vulnerability and a stronger desire for immediate emotional relief (Mendini & Furchheim, 2025). Loneliness has also been linked to impaired self-regulation and reduced cognitive control, both of which are critical factors underlying impulsive behavior. Chronic loneliness weakens individuals' ability to regulate emotions effectively, making them more susceptible to temptation and spontaneous decision-making (Baumeister & Vohs, 2021). As a result, lonely individuals may prioritize short-term emotional rewards over long-term consequences, increasing the likelihood of impulsive purchases (Saini et al., 2025).

The Mood Regulation Theory further explains the relationship between loneliness and impulsive buying by suggesting that individuals actively engage in behaviors that enhance positive emotions or reduce negative affect (Gross, 2015). For lonely consumers, impulsive buying triggers excitement, pleasure, and a sense of reward that temporarily alleviates feelings of sadness and social disconnection (Fumagalli & Schuttelaar, 2022). Although such purchases may provide immediate emotional comfort, the relief is often short-lived, reinforcing repetitive impulsive buying behavior as an emotional coping strategy.

Recent studies also highlight the role of digital and online shopping environments in strengthening the link between loneliness and impulsive buying. Easy access to online platforms, one-click purchasing, personalized recommendations, and continuous promotional exposure increase the likelihood of impulsive purchases among emotionally vulnerable consumers (Chen et al., 2020; Wang, 2023). For lonely individuals, these environments offer instant emotional stimulation and gratification without social effort, further intensifying impulsive buying tendencies.

In summary, contemporary literature consistently demonstrates that loneliness significantly contributes to impulsive buying behavior by impairing emotional regulation, reducing self-control, and increasing reliance on consumption-based coping strategies. Lonely individuals are more likely to engage in impulsive purchases to achieve temporary emotional relief and compensate for unmet social needs. Based on recent theoretical and empirical evidence, loneliness is expected to have a direct and positive influence on impulsive buying behavior.

Therefore, it is hypothesized that:

H6: Loneliness positively influences impulsive buying.

2.9 The Mediating Role of Loneliness between Phubbing and Shopping Escapism

Phubbing, defined as the act of ignoring individuals in one's physical presence by focusing on a smartphone, has emerged as a prevalent form of social neglect in contemporary interpersonal interactions. Recent literature indicates that phubbing disrupts face-to-face communication, weakens relationship quality, and reduces perceived social connectedness (Al-Saggaf & O'Donnell, 2019; Roberts & David, 2020). Being phubbed or engaging in phubbing behavior signals social exclusion and inattentiveness, which can gradually erode emotional bonds and interpersonal satisfaction. As a result, phubbing has been increasingly associated with adverse psychological outcomes, particularly loneliness.

Loneliness represents a subjective feeling of emotional isolation arising from perceived deficiencies in social relationships. Empirical studies demonstrate that phubbing significantly contributes to loneliness by diminishing feelings of inclusion, emotional validation, and interpersonal warmth (David & Roberts, 2021; Al-Saggaf, 2023). When individuals experience repeated phubbing encounters, they may perceive themselves as socially unimportant or disconnected, intensifying emotional loneliness. Thus, loneliness has been identified as a key psychological consequence of phubbing behavior in both personal and social contexts.

Building on Compensatory Consumption Theory, individuals experiencing emotional distress or unmet social needs often engage in consumption behaviors to compensate for psychological deficits (Mandel et al., 2017). Loneliness, in particular, motivates consumers to seek alternative sources of emotional comfort, distraction, and gratification through consumption activities (Huang et al., 2023). Shopping escapism emerges as a common coping strategy, allowing individuals to temporarily escape from emotional discomfort by immersing themselves in the shopping experience rather than addressing underlying social disconnection.

Recent research provides strong support for the relationship between loneliness and shopping escapism. Lonely individuals are more likely to engage in hedonic shopping, recreational browsing, and emotionally driven purchases as a means of regulating negative affect and alleviating feelings of emptiness (Fumagalli & Schuttelaar, 2022; Mendini & Furchheim, 2025). Online shopping environments further reinforce this tendency by offering anonymity, constant availability,

and personalized stimulation, making shopping an easily accessible escape from emotional distress (Wang, 2023).

Taken together, phubbing and shopping escapism appear to be indirectly linked through loneliness. Phubbing acts as a social stressor that reduces emotional connection and increases feelings of loneliness, while loneliness, in turn, encourages individuals to engage in escapist consumption behaviors as a coping mechanism. This indirect pathway aligns with prior mediation-based research suggesting that digital and interpersonal disruptions influence consumption behaviors through emotional and psychological states rather than direct effects alone (Thomas et al., 2024).

Furthermore, Mood Regulation Theory supports this mediating mechanism by proposing that individuals engage in behaviors that reduce negative emotions and restore emotional equilibrium (Gross, 2015). Loneliness resulting from phubbing creates emotional discomfort, which individuals attempt to regulate through escapist shopping experiences that offer temporary pleasure and distraction. Although such behaviors may provide short-term relief, they do not resolve the underlying social deficiencies caused by phubbing, thereby reinforcing reliance on consumption-based coping strategies.

In summary, existing theoretical and empirical literature suggests that phubbing does not directly lead to shopping escapism but rather operates through emotional mechanisms, particularly loneliness. Phubbing increases perceived social neglect and emotional isolation, which subsequently motivates individuals to seek psychological escape through shopping activities. Based on this mediating logic and supporting evidence, loneliness is expected to play a significant intermediary role in the relationship between phubbing and shopping escapism.

Therefore, it is hypothesized that:

H7: Phubbing indirectly affects shopping escapism through loneliness.

2.10 The Mediating Role of Loneliness between Phubbing and Impulsive Buying

Phubbing, the behavior of ignoring individuals in face-to-face interactions by focusing on smartphones, has become a common social phenomenon in digitally connected societies. Prior research indicates that phubbing disrupts interpersonal communication, reduces relationship satisfaction, and signals social neglect (Roberts & David, 2020; David & Roberts, 2021). Experiencing

phubbing, whether from peers, partners, or social contacts, can undermine feelings of emotional validation and belonging, thereby contributing to adverse psychological outcomes. Among these outcomes, loneliness has been identified as one of the most significant emotional consequences of persistent phubbing behavior.

Loneliness is a subjective emotional state characterized by perceived social disconnection and unmet relational needs. Empirical studies demonstrate that phubbing increases feelings of loneliness by weakening interpersonal bonds and diminishing perceived social support (Al-Saggaf, 2023). Repeated exposure to phubbing may lead individuals to feel ignored, undervalued, or socially excluded, which intensifies emotional loneliness over time. Thus, loneliness serves as a key psychological mechanism through which phubbing influences downstream behavioral responses.

From a consumer behavior perspective, loneliness has been widely associated with impulsive buying behavior. Impulsive buying refers to spontaneous, unplanned purchasing driven by emotional urges rather than deliberate cognitive evaluation (Verplanken & Sato, 2011). Recent literature suggests that individuals experiencing loneliness are more prone to impulsive buying due to impaired emotional regulation, reduced self-control, and a heightened desire for immediate emotional gratification (Huang et al., 2023; Mendini & Furchheim, 2025). As loneliness intensifies, individuals may seek rapid emotional relief through consumption, making impulsive buying a convenient coping mechanism.

According to Compensatory Consumption Theory, individuals engage in impulsive consumption behaviors to compensate for psychological deficits such as lack of belongingness, emotional emptiness, or social rejection (Mandel et al., 2017). When phubbing induces loneliness, affected individuals may turn to impulsive buying as a symbolic substitute for unmet social needs. The immediate pleasure and excitement associated with impulsive purchases temporarily alleviate emotional distress, reinforcing the behavior despite potential negative consequences (Rucker & Galinsky, 2016).

The Mood Regulation Theory further explains this indirect relationship by proposing that individuals actively select behaviors that reduce negative emotions and restore emotional equilibrium (Gross, 2015). Loneliness resulting from phubbing creates emotional discomfort, which individuals attempt to regulate through impulsive buying that offers short-term pleasure and distraction. Although such purchases may temporarily improve mood, they do not address the underlying

social disconnection caused by phubbing, potentially leading to repeated impulsive buying behavior.

Recent empirical research also highlights the role of digital and online shopping environments in strengthening this mediating mechanism. Online platforms facilitate impulsive purchases through one-click buying, personalized recommendations, and continuous exposure to promotional stimuli, which particularly appeal to emotionally vulnerable consumers (Chen et al., 2020; Wang, 2023). For lonely individuals affected by phubbing, these environments provide instant emotional gratification without requiring social effort, further intensifying impulsive buying tendencies.

In summary, existing literature suggests that phubbing indirectly contributes to impulsive buying behavior by increasing feelings of loneliness. Phubbing acts as a social stressor that undermines emotional connectedness, while loneliness functions as an emotional catalyst that increases reliance on impulsive consumption as a coping strategy. This mediating pathway aligns with contemporary psychological and consumer behavior theories, emphasizing the role of emotional mechanisms in linking digital social behaviors to maladaptive consumption outcomes.

Therefore, it is hypothesized that:

H8: Phubbing indirectly affects impulsive buying through loneliness

Table 1 Variable contribution to current Model

Variable Positioning and Contribution to the Current Model

Variable	Position in the Model	Role/Function	Key Supporting Research
Smartphone Addiction	Independent Variable (Digital Addiction)	Leads to compulsive mobile use, constant checking, emotional dependence; strongly predicts phubbing behavior.	Cha & Seo (2018); Davey et al. (2018); Karadağ et al. (2016)
Social Media Addiction	Independent Variable (Digital Addiction)	Creates excessive engagement with social platforms; increases checking habits during social interactions; major predictor of phubbing.	Griffiths (2013); Ünal & Yıldırım (2020); Karadağ et al. (2015)
FoMO (Fear of Missing Out)	Independent Variable (Digital Addiction)	Causes constant need for updates; intensifies smartphone/social media checking; indirectly leads to phubbing.	Przybylski et al. (2013); Balta et al. (2020); Franchina et al. (2018)
Phubbing	Mediator 1	Behavioral outcome of digital addiction; disrupts face-to-face communication; increases social disconnection and triggers loneliness.	Chotpitayasunondh & Douglas (2016); Maftei & Mairean (2023)
Loneliness	Mediator 2	Emotional outcome of phubbing; drives compensatory behaviors; key link between digital addiction and shopping behavior.	Mendini & Furchheim (2025); Mrad & Cui (2020)
Shopping Escapism	Dependent Variable (Compensatory Consumption)	Used to escape negative emotions and stress; coping response to loneliness.	Mendini & Furchheim (2025)
Impulsive Buying	Dependent Variable (Compensatory Consumption)	Sudden, unplanned purchases driven by emotional needs; increases when individuals feel lonely or distressed.	Mendini & Furchheim (2025); Chan et al. (2022)
Compensatory Consumption Theory	Underpinning Theory	Explains that people buy products to compensate for emotional, social, or psychological deficits; frames the entire pathway.	Mandel et al. (2017)

2.11 Hypothesis

H1: Smartphone addiction positively influences phubbing behavior.

H2: Social media addiction positively influences phubbing behavior

H3: Fear of Missing Out positively influences phubbing behavior.

H4: Phubbing positively influences loneliness.

H5: loneliness positively influences shopping escapism.

H6: loneliness positively influences impulsive point.

H7: Phubbing indirectly affects shopping escapism through loneliness.

H8: phubbing indirectly affects impulsive buying through loneliness.

2.12 The Underpinning Theory

The Compensatory Consumption Theory (CCT) provides an explanation for the ways in which individuals engage in consumption behaviors in order to deal with psychological deficits, emotional pain, or challenges to their social self. Within the scope of this investigation, digital

addictions, which include addiction to smartphones, addiction to social media, and fear of missing out (FOMO), are responsible for the development of psychological tension and social displacement, leading individuals to engage in behaviors such as phubbing. Phubbing is a social withdrawal response in which individuals prioritize their phones over genuine encounters. This leads to emotions of rejection and weakens social relationships. Phubbing involves individuals prioritizing their phones over real interactions. As a result of this breakdown in social connection, individuals experience feelings of loneliness, which the CCT describes as a fundamental emotional deficit that drives them to seek compensation through consumption. When digital stressors are transformed into consumption-based coping methods, loneliness emerges as the primary psychological mechanism that drives this transformation. When individuals are experiencing feelings of isolation, they often resort to shopping as a means of evading bad emotions and diverting their attention away from the psychological discomfort they are experiencing. In a similar vein, impulsive purchasing emerges as a compensating behavior that offers instantaneous emotional relief and assists individuals in momentarily regaining a sense of well-being. As a result, the entire model is consistent with the CCT: digital addictions cause behaviors that are detrimental to social relationships, which in turn leads to feelings of isolation, which in turn causes individuals to compensate by engaging in behaviors that encourage impulsive and escapist buying. This theoretical mapping sheds light on the chain of events that leads from excessive use of digital devices to mental distress and, eventually, to maladaptive behavioral habits of purchasing.

Table 2 - Mapping of Compensatory Consumption Theory

Mapping of Compensatory Consumption Theory With Study Variables

Theory Component (Compensatory Consumption Theory)	Study Variable	How the Variable Fits the Theory	Contribution to the Overall Model
1. Psychological Need / Emotional Deficit	**Loneliness**	Loneliness represents a deficit in emotional and social needs; CCT states that individuals compensate for such deficits through consumption.	Acts as the core emotional trigger that pushes individuals toward compensatory buying.
2. Threat to Social Self / Social Disconnection	**Phubbing**	Phubbing creates social rejection and disconnect, threatening one's social self. This threat increases internal discomfort, which CCT says people try to reduce through consumption.	Explains why digital behaviors generate emotional distress that later leads to coping-based shopping.
3. Coping Mechanism: Avoiding Negative Emotion	**Shopping Escapism**	Shopping escapism is a classic compensatory behavior used to escape negative emotions (e.g., loneliness, stress).	Represents the avoidance-based compensation described in CCT.
4. Restoring Positive Emotion	**Impulsive Buying**	Impulsive purchases provide quick emotional rewards and momentary relief, aligning with CCT's notion of restoring threatened self-worth and mood.	Functions as emotion-driven compensation responding to social and psychological distress.
5. Triggering Conditions	**Smartphone Addiction**	Excessive mobile dependence increases emotional imbalance, stress, and avoidance of real interactions—conditions that CCT identifies as precursors to compensatory consumption.	Starts the chain by creating vulnerability to emotional deficits.
	Social Media Addiction	Social comparison, validation-seeking, and compulsive engagement heighten emotional instability—fueling conditions for compensatory consumption.	Further strengthens the emotional and social vulnerabilities leading to compensation.
	FoMO	FoMO produces anxiety, inadequacy, and emotional tension—recognized in CCT as threats to psychological well-being.	Drives compulsive checking, leading to phubbing and emotional emptiness.
6. Behavioral Displacement / Disconnection from Real Relationships	**Phubbing (as outcome of digital addiction)**	Disconnection from real-life social experiences intensifies internal deficits; CCT views this as a precursor to compensatory consumption.	Acts as mediator 1 that explains how digital addiction transforms into emotional distress.
7. Emotional Deficit Leading to Consumption Response	**Loneliness (as mediator)**	Loneliness signals unmet psychological needs; CCT states consumers use material goods to fill this emotional gap.	Mediator 2 connecting emotional deficit to consumption behavior.
8. Compensatory Behavior (Final Outcome)	**Shopping Escapism & Impulsive Buying**	Both reflect attempts to replace emotional pain with consumption.	Final outcome predicted by CCT's emotional compensation process.

2.13. Theoretical Framework

Figure 1 Theoretical Framework

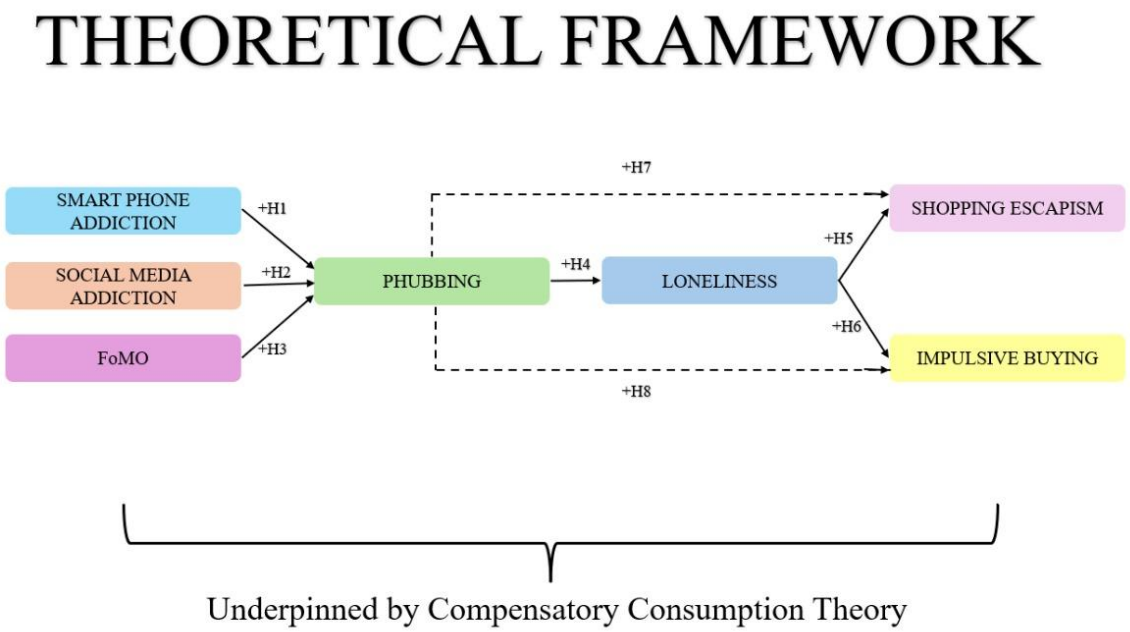


Table 3 Model Summary Chain Format

Model Summary in Chain Format

Step	Pathway Component	Contribution to Overall Model
1	**Digital Addictions (Smartphone Addiction, Social Media Addiction, FoMO)**	Create compulsive digital engagement and overuse behaviors.
2	**→ Phubbing**	Digital overuse shifts attention away from real-life interactions, causing social disconnection.
3	**→ Loneliness**	Emotional response to being ignored or socially disconnected due to phubbing.
4	**→ Shopping Escapism & Impulsive Buying**	Individuals compensate for loneliness through shopping-based emotional relief.
5	**Compensatory Consumption Theory**	Provides theoretical explanation for why loneliness leads to escapist and impulsive buying.

CHAPTER 3

RESEARCH METHODOLOGY

3. 1 Introduction

Methodology is the backbone of any empirical inquiry, providing the rationale and systematic structure through which research objectives are translated into analytical outcomes. According to Saunders, Lewis, and Thornhill (2007), research constitutes a systematic, rigorous, and objective process undertaken to expand the frontiers of knowledge through the generation of verifiable evidence.

3.2 Research Design

Quantitative and an exploratory research design has been adapted for this study to measure the different behaviors and to measure the variables, independent variables, mediating variables in the dependent variable and to find out how they are linked the whole of the responses are collected at one time and so this falls into the cross-sectional search type.

Design purpose quantitative and explore research design has been adapted to measure different behaviors and then I try to find out how they are linked and all of the responses have been collected at one time so this is a research falls into the cross-sectional research.

3.3 Research Approach

The methodology of the research deductive approach has been adopted and with the underpinning theory of the compensatory consumption theory to examine the relationship derived in the above theoretical framework and then the data has been collected via questionnaire as the study is guided by clearly different hypothesis so the most appropriate research approach is the detector approach I have used.

3.4 Population of the Study

For the purpose of this study population has been keep kept confined to the Gen Z, university students in Islamabad and Rawalpindi Pakistan, the tech savvy generation were using and are

very savvy of using smartphone and the social media and just some of the early professional has also been considered in this population has been chosen intentionally because this population is using a frequently using social media frequently and are more likely to experience the behaviors and the variables that we have discussed in our framework so the population of this study has been chosen very carefully and diligently

3.5 Sampling Technique

Sample has been chosen very carefully and only those people have been targeted who already fit the criteria they are using mobile phones regularly and they're very active on the social media and they are very active on online shopping as well and for this the purpose of sampling was the most appropriate sampling technique so I used that.

3.6 Sample Size

For the 95% confidence level I have decided to collect at least more than 300 responses to validate different statistical tests that I wanted to learn especially for the mediation analysis and the structural equation modeling analysis usually 200 is enough for this kind of research but for safety I go above that. So, I got form 350 with 300 valid responses.

3.7 Data Collection Procedure

The Google form survey has been created so as this study is all about the digital behaviors and digital consumption so it was very easy for me to collect the data through digital platforms including:

- WhatsApp
- University groups
- Instagram
- Facebook

Anyone who fit the criteria could fill it out voluntarily.

3.8 Research Instrument

The questionnaire was divided into two main sections.

3.8.1. Section A: Demographic Information

Demographic section responded with asked to share their age gender education level and daily smartphone and social media usage so the demographic information has been collected through these 5 handles.

3.8.2. Section B: Study Variables

Part of the research instrument include the key construct and the key variables of this study including smartphone addiction formal social media addiction for being loneliness shopping escapism and impulsive buying so all of these items have been rated on five point Likert scales and the question I have been adapted from the previous studies that are well established and well properly validated to ensure the clarity and validity and reliability of the constructs.

3.9 Measurement Scales

All the constructs in this investigation were measured by validated scales from existing empirical studies. Items were reworded slightly, as needed to reflect the study context with no loss of item face validity. Responses were scored using Likert's scale and the higher the scores, the higher are these constructs except if indicated otherwise.

3.9.1 Smartphone addiction

Smartphone addiction has been measured on 5 item scale found in the study conducted by Talan, Doğan & Kalinkara (2024) who studied the role of smartphone addiction on phubbing behavior among university students.

The functional scale includes functional impairment, withdrawal symptoms, excessive use, and behavioral addiction in relation to smartphone use.

Answers were rated from 1 (Strongly Disagree) to 6 (Strongly Agree) and averaged. The higher the score, the more addicted to smartphones they are.

3.9.2 Social Media Addiction

Social media addiction was examined by a 10-item social media addiction scale adapted from Talan et al. (2024). The items measure compulsive social media checking, preference for online communication, content engagement, and emotional involvement with social networking sites.

This was measured with a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The higher the score, the higher the level of social media addiction.

3.9.3 Fear of Missing Out (FoMO)

Fear of Missing Out (FoMO) has been measured using a 5-item scale adapted from Talan et al. (2024), based on the original FoMO definition by Przybylski et al. The items measure fear of missing experiences and the need to always be connected online.

Participants answered with a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Higher scores indicate more intense FoMO.

3.9.4 Phubbing

Phubbing behavior from respondent has been was assessed with a 05-item Likert scale adopted from Talan et al. (2024).

This scale measures the degree if individual using smartphones over physical interactions.

Responses were recorded on a 5-point scale. Scale is Running from 1 (Strongly Disagree) to 5 (Strongly Agree). A higher score reflects more frequent phubbing.

3.9.5 Loneliness

Loneliness has been measured through a 5-item scale adapted from Maftei and Măirean (2023), which examined the role of loneliness as a mediating variable between phubbing behavior and mental health.

Two items were reverse-scored to prevent response bias. Participant responses were collected on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). More points on the score = greater perceived loneliness.

3.9.6 Shopping Escapism

Escapism has been measured using items taken from Mandel, Rucker, Levav, and Galinsky (2017), who examined escapist consumerism as a mechanism for coping with emotional conditions including loneliness. It assesses the degree to which individuals engage in shopping as a means to alleviate stress, divert attention from issues, and evade reality.

Responses were recorded on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A superior score signifies a more pronounced inclination towards shopping escapism.

3.9. 7 Impulsive Buying

Impulsive purchasing behavior was evaluated using a 6-item measure derived from Mandel et al. (2017). The variable measures the impulsive buying, spontaneous decision-making, and disregard for repercussions. One item was reverse-coded, and duplicate phrasing was preserved solely once to ensure clarity.

Ratings were obtained using a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). Elevated scores indicate increased impulsive purchasing behaviors.

Table 4 Social Media Addiction Scale

Variable	Measurement Items	Source
Social Media Addiction	1. I check my social media accounts even when I have other important tasks to do. 2. I check my social media accounts whenever possible. 3. I frequently share my activities or moments on social media. 4. I follow trending topics, popular videos, and online activities. 5. I regularly check the social media profiles of people I know. 6. I also check the profiles of people I do not personally know. 7. I prefer communicating with friends via social media rather than face-to-face. 8. I wonder whether my friends have read or reacted to my posts. 9. I follow daily news and current affairs through social media. 10. I prefer using social media over watching television.	Talan, Doğan, & Kalinkara (2024)

Table 5 Smart Phone Addiction Scale

Variable	Measurement Items	Source
Smartphone Addiction	1. I postpone important tasks because of smartphone use. 2. I have difficulty focusing on work or studies due to smartphone use. 3. I experience physical discomfort (e.g., neck or wrist pain) from smartphone use. 4. I feel uncomfortable when I do not have my smartphone with me. 5. I become impatient or irritable when I cannot use my smartphone. 6. Even when not using it, my smartphone is often on my mind. 7. I continue using my smartphone even when it disrupts my daily life. 8. I constantly check my smartphone so I do not miss online interactions. 9. I use my smartphone for longer than I intend to. 10. People around me complain about my excessive smartphone use.	Talan, Doğan, & Kalinkara (2024)

Table 6 FoMO Scale

Variable	Measurement Items	Source
Fear of Missing Out	1. I fear that others are having more rewarding experiences than me. 2. I worry that my friends are enjoying life more than I am. 3. I feel anxious when I learn that my friends had fun without me. 4. I feel uneasy when I do not know what my friends are doing. 5. Understanding inside jokes and shared conversations among friends is important to me. 6. I spend too much time keeping up with what is happening online. 7. Missing opportunities to meet my friends upsets me. 8. When I have a good experience, I feel the need to share it online. 9. Missing planned gatherings makes me feel distressed. 10. Even while on vacation, I follow what my friends are doing.	Przybylski et al. (2013); Adapted from Talan et al. (2024)

Table 7 Phubbing Scale

Variable	Measurement Items	Source
Phubbing Behavior	1. My attention often shifts to my phone when I am with others. 2. I am frequently busy using my phone when spending time with friends. 3. People complain about my mobile phone use. 4. I stay engaged with my phone even during social interactions. 5. I do not believe my phone use annoys people around me. 6. My phone is always within my reach. 7. Checking my phone is the first thing I do after waking up. 8. I feel incomplete without my mobile phone. 9. My mobile phone usage has increased over time. 10. My social, personal, or professional time has decreased due to phone use.	Talan, Doğan, & Kalinkara (2024)

Table 8 Loneliness Scale

Variable	Measurement Items	Source
Loneliness	1. I lack companionship. 2. There is no one I can turn to. 3. I am an outgoing person. *(Reverse-coded)* 4. I feel left out. 5. I feel isolated from others. 6. I can easily find companionship when I want it. *(Reverse-coded)* 7. I feel unhappy because I am withdrawn. 8. People are around me, but I still feel alone.	Maftei & Măirean (2023); based on UCLA Loneliness Scale

Table 9 Shopping Escapism Scale

Variable	Measurement Items	Source
Shopping Escapism	1. I shop to avoid thinking about my problems. 2. I shop to distract myself from things that bother me. 3. I shop to escape from reality for a while. 4. Shopping helps me forget about daily stress. 5. I shop to feel relief from everyday worries. 6. I shop to take a mental break from routine life.	Mandel, Rucker, Levav, & Galinsky (2017)

Table 10 Impulsive Buying

Variable	Measurement Items	Source
Impulsive Buying (IB)	1. I buy things that I did not plan to purchase. 2. I make unplanned purchases. 3. When I see something interesting, I buy it without considering the consequences. 4. I find spontaneous buying enjoyable. 5. I usually avoid buying items that are not on my shopping list. *(Reverse-coded)*	Mandel, Rucker, Levav, & Galinsky (2017)

3.9 Data Preparation and Screening Scale

Data was collected and now the preparation and the screening process start with the SPSS that involved checking for missing values incomplete responses coding and labeling the different constructs and checking the normality and other descriptive statistics portion so is steps has been taken to ensure the accuracy of the data set and to check the suitability and the validity for the upcoming multivariate analysis.

CHAPTER 4

FINDINGS AND ANALYSIS

4.1 Introduction

In order to run data analysis, data coding is done, some of the questions were revised so that reliability is done with those questions. SPSS was utilized for data cleaning, missing values, etc. Reliability analysis is done in order to check the data consistency. Moreover, SmartPLS was utilized for structural equation modeling and hypothesis testing of direct effect and mediation effect. The validity and reliability test run in order to check the reliability of data. Heterotrait-Monotrait (HTMT) is run in order to ensure discriminant validity. Predictive values of R square and Q square are calculated to check the interaction between the variables. And in last the PLS-SEM algorithm was run in order to test the hypothesis of research study.

4.2 Demographics Data

Table 11 Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	124	40.1	40.1	40.1
Female	185	59.9	59.9	100
Total	309	100	100	—

The distribution of gender is presented in Table 4.1.1. The sample consisted of a higher proportion of females (59.9%) compared to males (40.1%), indicating that female participants were more strongly represented in the study. This gender imbalance should be considered when interpreting the results and assessing the generalizability of the findings.

Table 12 Education

EDU	Frequency	Percent	Valid Percent	Cumulative Percent
1	66	21.36	21.36	21.36
2	149	48.22	48.22	69.58
3	72	23.3	23.3	92.88
4	12	3.88	3.88	96.76
5	10	3.24	3.24	100

Out of 300 participants, 115 (38.3%) were having bachelor's qualification, then the participants as shown in Table 4.1.2, educational attainment was concentrated in the lower to middle categories. Nearly half of the participants were classified as Education level 2 (48.2%), followed by Education level 3 (23.3%) and Education level 1 (21.4%). Higher education levels were less common, with only 3.9% and 3.2% of respondents reporting Education levels 4 and 5, respectively. Cumulatively, 69.6% of participants fell at or below Education level 2, indicating a sample largely characterized by lower to moderate educational attainment.

Table 13 Social Media Use Hours

SMU_HRS	Frequency	Percent	Valid Percent	Cumulative Percent
1	60	19.42	19.42	19.42
2	109	35.28	35.28	54.7
3	108	34.95	34.95	89.65
4	26	8.41	8.41	98.06
5	6	1.94	1.94	100

The distribution of social media use hours is summarized in Table 4.1.3. Most participants reported moderate levels of social media use, with 35.3% indicating 2 hours and 35.0% indicating 3 hours per day. Lower usage (1 hour) was reported by 19.4% of respondents, whereas higher usage was relatively infrequent, with 8.4% reporting 4 hours and 1.9% reporting 5 hours of use.

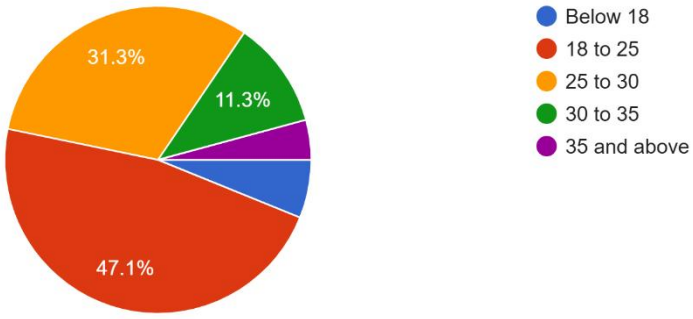
Table 14 Age

AGE	Frequency	Percent	Valid Percent	Cumulative Percent
1	19	6.15	6.15	6.15
2	146	47.25	47.25	53.4
3	97	31.39	31.39	84.79
4	34	11	11	95.79
5	13	4.21	4.21	100

The age distribution of the respondents is summarized in Table 7. Most participants belonged to Age Category 2 (47.25%), followed by Age Category 3 (31.39%). Combined, these two categories comprised 78.64% of the sample, indicating a concentration of respondents within the lower-to-middle age ranges. Smaller proportions were observed in Age Category 4 (11.00%) and Age Category 5 (4.21%), while Age Category 1 constituted the smallest segment (6.15%). Overall, the distribution indicates that the sample was predominantly composed of younger individuals.

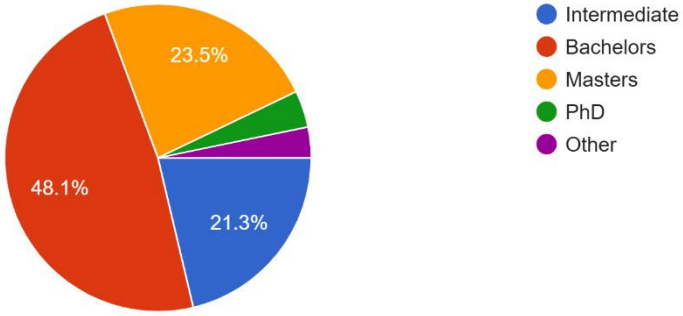
SECTION A — Demographics: Your Age

310 responses



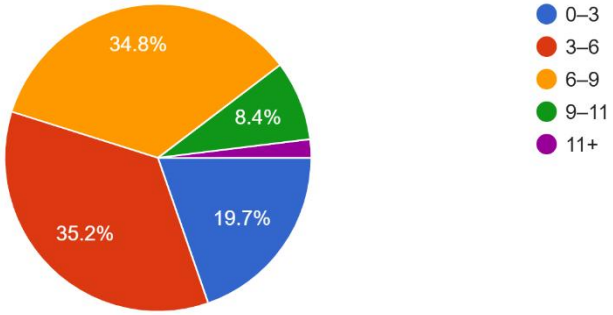
Educational Level

310 responses

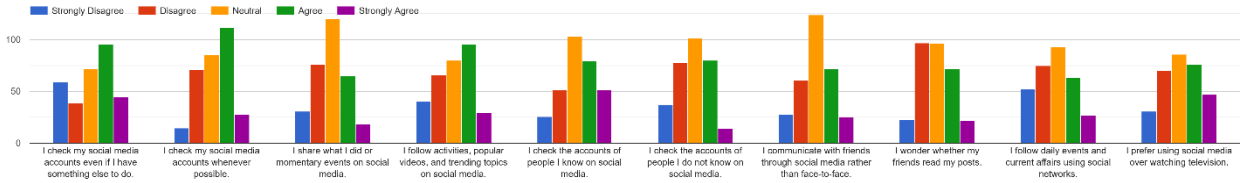


Approximate Social Media Use (hours per day)

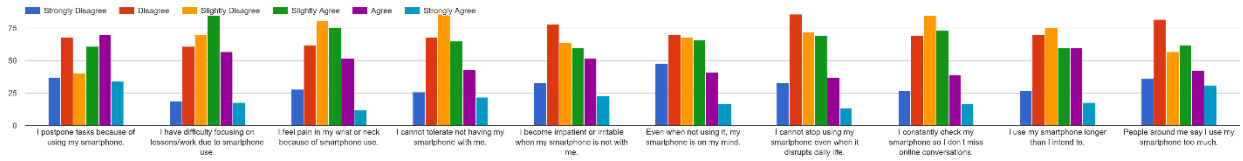
310 responses



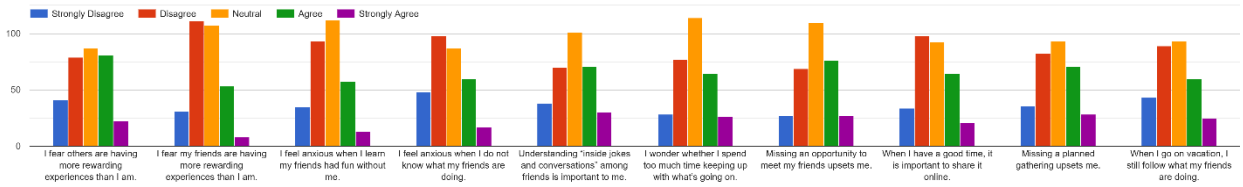
SECTION B—Indicate your level of agreement with the following statements regarding social media use.



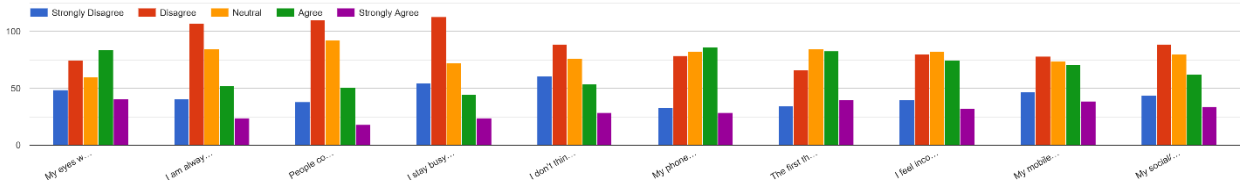
SECTION C — Indicate your level of agreement with the following statements about smartphone use.



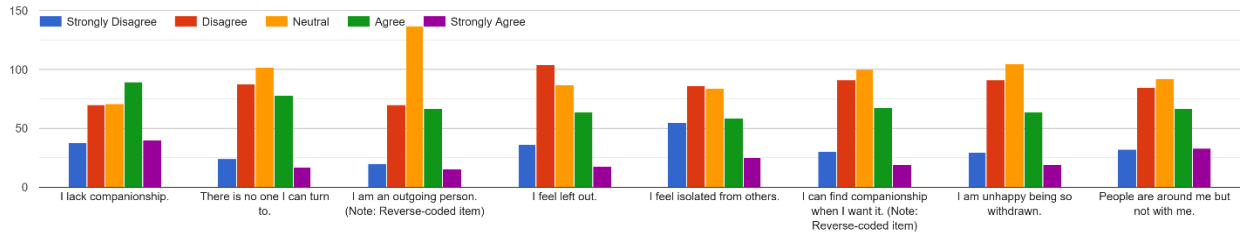
SECTION D — Indicate your level of agreement with the following statements.

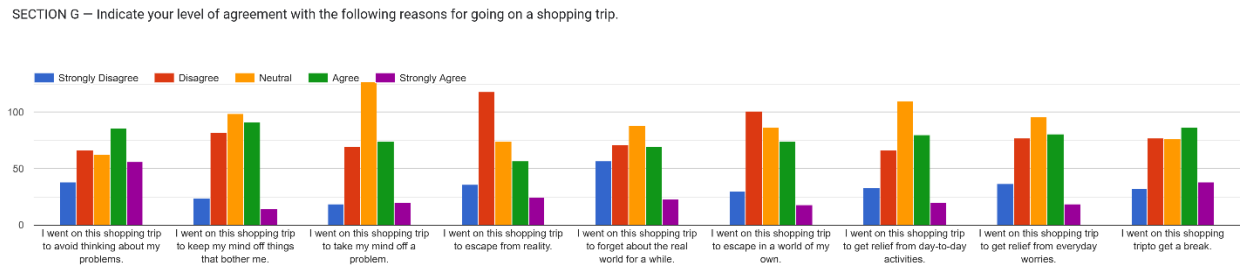


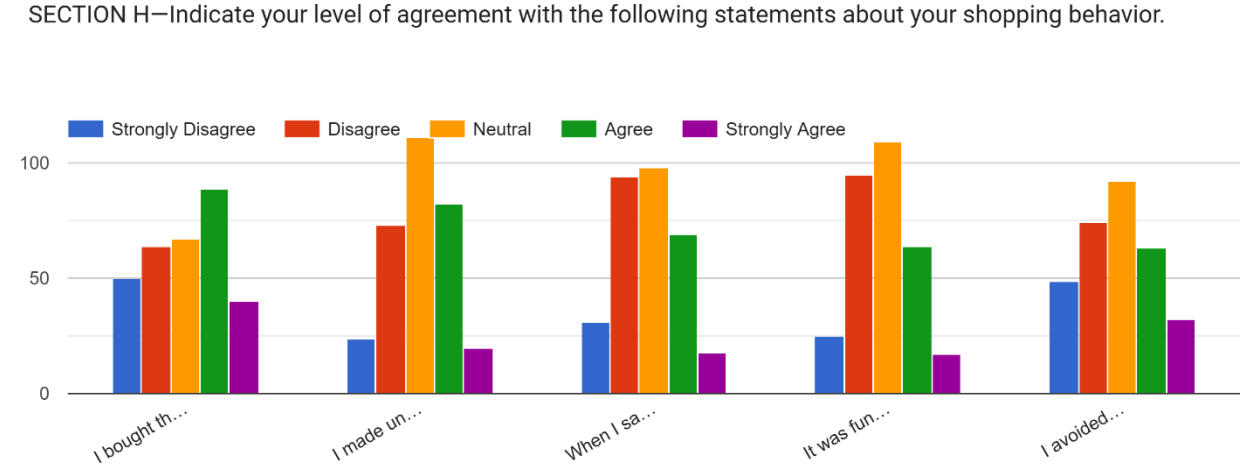
SECTION E—How often do you engage in the following behaviors related to mobile phone use when with others?



SECTION F— How often do you feel the following?







4.3 Structural Equation Modeling

It is good to examine boundary as well as theories. PLS-SEM has been applied by Chin (1998). It is used to analyze researchers in consumer behavior studies. Hair et al. (2011) recommended SmartPLS software to examine the relationships. PLS is suitable for complex data. The structural equation modeling was run using SmartPLS software.

4.4 Measurement Model

4.4.1. Reliability and Validity

We used Cronbach's alpha, composite reliability (ρa and ρc), and average variance extracted (AVE) to check the internal consistency reliability and convergent validity of the study constructs (see Table 8). The values of Cronbach's alpha ranged from .745 to .866, which is higher than the required minimum of .70 (Nunnally & Bernstein, 1994). This shows that all of the constructs had good internal consistency.

Estimates of composite reliability backed up these results even more. The values of ρa went from .764 to .870, and the values of ρc went from .842 to .896. All of them were higher than the indicated cutoff value of .70 (Hair et al., 2019). These results show that the constructs are reliable and consistent to measure their own latent variables.

AVE was used to test for convergent validity. The AVE values were between .500 and .576, which is equal to or higher than the minimum recommended value of .50 (Fornell & Larcker, 1981). The results show that all of the constructs have good internal consistency reliability and convergent validity. This means that the measuring model is good for later structural model analysis.

Table 15 Indicator Loadings

	ESCP	FOMO	IB	LON	PHBN	SMA	SPA
ESCP1	0.636						
ESCP2	0.799						
ESCP3	0.768						
ESCP4	0.668						
ESCP6	0.648						
ESCP7	0.731						
ESCP8	0.763						
ESCP9	0.643						
FOMO10		0.747					
FOMO2		0.699					
FOMO6		0.657					
FOMO7		0.703					
FOMO8		0.765					
FOMO9		0.664					

IB1	0.695			
IB2	0.862			
IB3	0.841			
IB4	0.609			
LON2		0.686		
LON4		0.787		
LON5		0.695		
LON7		0.782		
LON8		0.731		
PHBN1			0.698	
PHBN10			0.765	
PHBN2			0.8	
PHBN3			0.771	
PHBN4			0.639	
PHBN7			0.582	
PHBN8			0.722	
PHBN9			0.768	
SMA10				0.727
SMA2				0.773
SMA7				0.662
SMA8				0.79
SMA9				0.707

SPA2	0.655
SPA4	0.718
SPA5	0.722
SPA6	0.719
SPA7	0.769
SPA8	0.714
SPA9	0.667

Table 16 Cronbach's alpha and composite reliability values

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ESCP	0.859	0.865	0.89	0.504
FOMO	0.803	0.809	0.857	0.5
IB	0.745	0.764	0.842	0.576
LON	0.79	0.793	0.856	0.544
PHBN	0.866	0.87	0.896	0.521
SMA	0.785	0.789	0.853	0.538
SPA	0.835	0.836	0.877	0.504

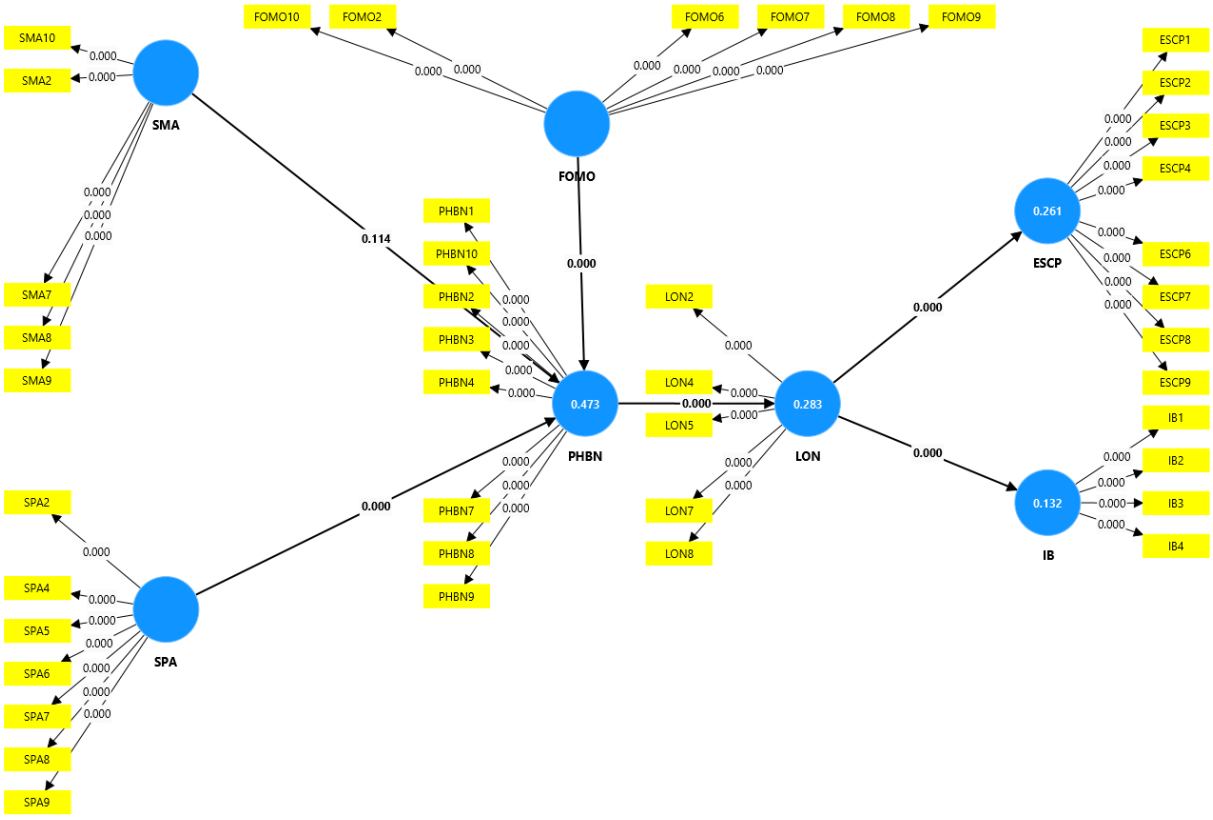
Cronbach's alpha and composite reliability values above .70 indicate satisfactory reliability, while AVE values of .50 or higher indicate adequate convergent validity.

4.5 PLS-SEM Model

Below Figure 2 PLS-SEM Model presents the results of the structural model estimated using PLS-SEM. The model explained 47.3% of the variance in phubbing behavior (PHBN), 28.3% in loneliness (LON), 26.1% in shopping escapism (ESCP), and 13.2% in impulsive buying (IB), indicating acceptable explanatory power.

Fear of missing out (FoMO) and smartphone addiction (SPA) had significant positive effects on phubbing, whereas the effect of social media addiction (SMA) on phubbing was not significant. Phubbing significantly increased loneliness, which in turn positively predicted both shopping escapism and impulsive buying. Overall, the results support the proposed framework and highlight the mediating roles of phubbing and loneliness in explaining compensatory consumption behaviors.

Figure 2 PLS-SEM Model



4.6. Discriminant Validity

Fornell & Larcker's (1981) analysis utilized in order to check discriminant validity (Hair et al., 2014). The square root of AVE for each variable is greater than the parallel combined variables. HTMT ratio should be less than 0.90.

4.6.1 Discriminant Validity

Discriminant validity was assessed by examining the inter-construct correlations among the study variables (see Table 4.5.1). The correlations ranged from .362 to 751, indicating moderate associations between constructs without evidence of excessive overlap. In particular, the strongest relationship was observed between PHBN and SPA (r = .751), while the weakest relationship was found between IB and SMA (r = .362).

Overall, the correlations between constructs were below the commonly accepted threshold of.85, suggesting that each construct captures a distinct conceptual domain (Kline, 2016). These

results provide support for adequate discriminant validity, indicating that the constructs are empirically distinguishable from one another.

Table 17 Discriminant Validity

	ESCP	FOMO	IB	LON	PHBN	SMA	SPA
ESCP							
FOMO	0.454						
IB	0.537	0.55					
LON	0.601	0.606	0.47				
PHBN	0.51	0.581	0.478	0.635			
SMA	0.39	0.493	0.362	0.392	0.5		
SPA	0.442	0.558	0.479	0.531	0.751	0.603	

4.6.2 Collinearity Assessment (VIF)

Collinearity among the predictor constructs was examined using the variance inflation factor (VIF). As shown in Table 11, VIF values ranged from 1.00 to 1.51, indicating no serious multicollinearity concerns. The highest values were observed for FoMO (VIF = 1.33), social media addiction (SMA; VIF = 1.39), and smartphone addiction (SPA; VIF = 1.51), while the remaining constructs had VIF values close to 1.00.

Table 18 Collinearity Assessment (VIF)

	ESCP	FOMO	IB	LON	PHBN	SMA	SPA
ESCP							
FOMO					1.329		
IB							
LON	1		1				
PHBN				1			
SMA					1.385		
SPA					1.505		

These findings indicate that multicollinearity is not a concern in the structural model. Therefore, the estimates of the path coefficients are unlikely to be biased due to collinearity among the predictor constructs.

Overall, the results confirm that the structural model satisfies the assumptions regarding collinearity, supporting the robustness and interpretability of the subsequent structural path analysis.

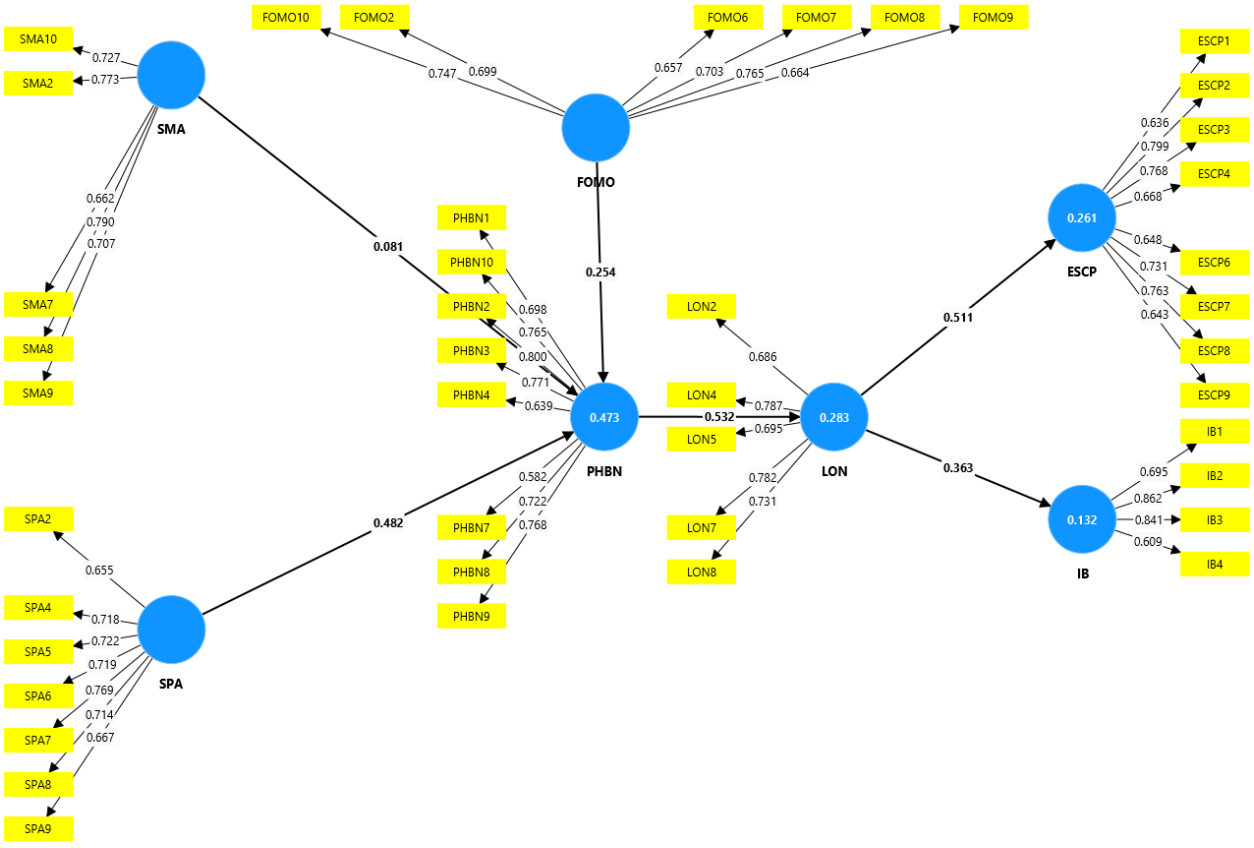
4.7 HTMT Ratio

Table19 HTMT

	ESCP	FOMO	IB	LON	PHBN	SMA	SPA
ESCP							
FOMO	0.454						
IB	0.537	0.55					
LON	0.601	0.606	0.47				
PHBN	0.51	0.581	0.478	0.635			
SMA	0.39	0.493	0.362	0.392	0.5		
SPA	0.442	0.558	0.479	0.531	0.751	0.603	

4.8 Structural Model

Figure 3 Structural Model



4.9 Hypothesis Testing

The direct relationships proposed in the theoretical framework were tested using the bootstrapping procedure in PLS-SEM. The standardized path coefficients (β), t statistics, and p values are reported in below table 13.

Table 20 Direct Effects and Hypothesis Testing

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
FOMO -> PHBN	0.254	0.258	0.05	5.113	0.00
LON -> ESCP	0.511	0.517	0.061	8.33	0.00
LON -> IB	0.363	0.37	0.069	5.242	0.00
PHBN -> LON	0.532	0.534	0.06	8.881	0.00
SMA -> PHBN	0.081	0.084	0.051	1.581	0.114
SPA -> PHBN	0.482	0.48	0.064	7.566	0.00

The results indicate that fear of missing out (FoMO) has a positive and statistically significant effect on phubbing behavior (PHBN) ($\beta = .254$, $t = 5.11$, $p < .001$). This finding supports the hypothesis that individuals experiencing higher levels of FoMO are more likely to engage in phubbing behavior.

Loneliness (LON) was found to exert a strong positive effect on shopping escapism (ESCP) ($\beta = .511$, $t = 8.33$, $p < .001$) as well as on impulsive buying (IB) ($\beta = .363$, $t = 5.24$, $p < .001$). These results suggest that feelings of loneliness significantly impact compensatory consumption behaviors.

Furthermore, phubbing behavior (PHBN) demonstrated a significant positive influence on loneliness ($\beta = .532$, $t = 8.88$, $p < .001$), indicating that frequent phubbing intensifies social disconnection and emotional isolation.

With regard to technology-related antecedents, smartphone addiction (SPA) showed a significant positive effect on phubbing behavior ($\beta = .482$, $t = 7.57$, $p < .001$), providing strong support for the proposed relationship. In contrast, the effect of social media addiction (SMA) on phubbing was not statistically significant ($\beta = .081$, $t = 1.58$, $p = .114$), suggesting that social media addiction alone does not directly predict phubbing behavior in the presence of other technological factors.

Overall, five of the six direct hypotheses were supported, confirming most of the proposed relationships in the structural model.

4.10 Hypothesis Support Summary

Table 21 Hypothesis Support Summary

Hypothesis	Path	Result
H1	FoMO → PHBN	Supported
H2	SMA → PHBN	Not supported
H3	SPA → PHBN	Supported
H4	PHBN → LON	Supported
H5	LON → ESCP	Supported
H6	LON → IB	Supported

Overall, findings provide empirical support for the theoretical framework underpinned by Compensatory Consumption Theory, highlighting phubbing and loneliness as key variables through which digital behaviors influence compensatory consumption outcomes.

4.11 Mediation

The indirect effects proposed in the theoretical framework were examined using a bootstrapping procedure to assess the mediating roles of phubbing behavior (PHBN) and loneliness (LON). The results of the mediation analysis are presented in Table X.

Table 22 Mediation Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
PHBN -> LON -> ESCP	0.272	0.277	0.051	5.356	0
PHBN -> LON -> IB	0.193	0.199	0.048	4.046	0
SMA -> PHBN -> LON	0.043	0.045	0.028	1.521	0.128
SPA -> PHBN -> LON	0.256	0.257	0.044	5.835	0
SPA -> PHBN -> LON -> ESCP	0.131	0.133	0.03	4.327	0
FOMO -> PHBN -> LON -> IB	0.049	0.051	0.016	3.041	0.002
SMA -> PHBN -> LON -> ESCP	0.022	0.023	0.015	1.445	0.149
SPA -> PHBN -> LON -> IB	0.093	0.096	0.027	3.512	0
FOMO -> PHBN -> LON -> ESCP	0.069	0.072	0.019	3.551	0
FOMO -> PHBN -> LON	0.135	0.138	0.033	4.134	0
SMA -> PHBN -> LON -> IB	0.016	0.017	0.012	1.342	0.18

The findings indicate that phubbing behavior indirectly influenced shopping escapism through loneliness (PHBN → LON → ESCP; $\beta = .272$, $t = 5.36$, $p < .001$). Similarly, a significant indirect effect has been observed for phubbing on impulsive buying via loneliness (PHBN → LON → IB; $\beta = .193$, $t = 4.05$, $p < .001$). These results suggest that loneliness serves as a key psychological mechanism through which phubbing behavior translates into compensatory consumption outcomes.

Smart phone addiction (SPA) demonstrated a significant indirect effect on loneliness through phubbing (SPA → PHBN → LON; $\beta = .256$, $t = 5.84$, $p < .001$). Furthermore, smartphone addiction exerted significant serial mediation effects on both shopping escapism (SPA → PHBN → LON → ESCP; $\beta = .131$, $t = 4.33$, $p < .001$) and impulsive buying (SPA → PHBN → LON → IB; $\beta = .093$, $t = 3.51$, $p < .001$). These findings indicate that phubbing and loneliness jointly transmit the effects of smartphone addiction to compensatory consumption behaviors.

In addition, fear of missing out (FoMO) was found to have significant indirect effects on loneliness (FoMO → PHBN → LON; $\beta = .135$, $t = 4.13$, $p < .001$) as well as on shopping escapism (FoMO → PHBN → LON → ESCP; $\beta = .069$, $t = 3.55$, $p < .001$) and impulsive buying (FoMO → PHBN → LON → IB; $\beta = .049$, $t = 3.04$, $p = .002$). These results highlight phubbing and loneliness as important mediators linking FoMO to compensatory consumption outcomes.

In contrast, the indirect effects involving social media addiction (SMA) were not statistically significant. This suggests that social media addiction does not exert an indirect influence on loneliness or compensatory consumption behaviors through phubbing within the proposed model.

Overall, the mediation analysis provides strong evidence that phubbing and loneliness function as critical intervening mechanisms, particularly in transmitting the effects of smartphone addiction and FoMO to shopping escapism and impulsive buying.

In sum, these findings reinforce Compensatory Consumption Theory by demonstrating that digital behaviors influence compensatory consumption primarily through social disengagement (phubbing) and emotional distress (loneliness).

Chapter 5

DISCUSSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a discussion of the empirical findings of the study in relation to the research objectives, hypotheses, and the underlying theoretical framework. The primary aim of this chapter is to interpret the results rather than merely restate them, by situating the findings within the context of existing literature and Compensatory Consumption Theory. The discussion specifically examines how digital addictions contribute to phubbing behavior, how phubbing intensifies feelings of loneliness, and how loneliness subsequently leads to compensatory consumption behaviors, particularly in the form of shopping escapism and impulsive buying.

5.2 Digital Addictions and Phubbing

The findings of the study indicate that smartphone addiction and fear of missing out (FoMO) exert a significant positive influence on phubbing behavior, thereby supporting Hypotheses H1 and H3. These results suggest that individuals who are excessively attached to their smartphones or who experience anxiety related to missing online updates are more likely to disengage from face-to-face interactions and ignore others during social encounters.

This outcome is consistent with prior research demonstrating that smartphone addiction is associated with compulsive checking behaviors, even in the presence of ongoing social interactions (Karadağ et al., 2015; Davey et al., 2018). Similarly, FoMO-driven anxiety promotes continuous monitoring of social media content, which in turn increases the likelihood of phubbing behavior (Franchina et al., 2018). Collectively, these findings reinforce the view that phubbing is not merely a matter of poor social etiquette but rather a behavioral manifestation of deeper psychological and technological dependencies.

In contrast, social media addiction did not exhibit a significant direct effect on phubbing behavior, leading to the rejection of Hypothesis H2. Although this result diverges from some earlier studies, it aligns with more recent research suggesting that when smartphone addiction and FoMO are examined concurrently, the explanatory influence of social media addiction diminishes. This pattern implies that phubbing is driven more by overall device dependency and anxiety associated with disconnection than by addiction to specific social media platforms alone.

5.3 Phubbing and Loneliness

The results provide strong support for Hypothesis H4, indicating that phubbing has a significant and positive effect on feelings of loneliness. This finding suggests that frequent engagement in phubbing behavior weakens interpersonal relationships, reduces emotional connectedness, and contributes to perceptions of social isolation.

This outcome is consistent with existing literature demonstrating that phubbing disrupts communication quality, signals social rejection, and diminishes relationship satisfaction (Maffei & Märrean, 2023). When individuals prioritize smartphone use over direct social interaction, they inadvertently create emotional distance, thereby reinforcing feelings of loneliness. Overall, these findings offer empirical support for the argument that digitally mediated behaviors can adversely affect social well-being.

5.4 Loneliness and Compensatory Consumption Behaviors

The study's findings demonstrate that loneliness has a significant positive effect on both shopping escapism and impulsive buying, thereby supporting Hypotheses H5 and H6. These results indicate that individuals experiencing loneliness are more inclined to engage in consumption behaviors as a coping strategy to regulate negative emotions and compensate for unmet social needs.

This finding is consistent with Compensatory Consumption Theory, which posits that consumers employ purchasing behavior to offset emotional or social deficiencies (Mandel et al., 2017). Shopping offers temporary emotional relief, distraction, and a perceived sense of control, particularly for individuals who feel socially disconnected. Moreover, the results align with prior research suggesting that loneliness is associated with increased materialistic orientations and heightened impulsive purchasing tendencies (Mendini & Furchheim, 2025).

5.5 Mediating Role of Loneliness

The mediation study substantiates that loneliness mediates the association between phubbing and both shopping escapism and impulsive purchase, hence validating Hypotheses H7 and H8. This suggests that phubbing does not directly incite compensatory consumption; instead, it induces mental suffering characterized by loneliness, which subsequently drives purchasing behavior.

This discovery is theoretically noteworthy, as it empirically illustrates the emotional process by which social separation influences consumer behavior. It emphasizes loneliness as a significant psychological conduit connecting internet interaction patterns to consumption results.

5.6 Sequential Mediation of Phubbing and Loneliness

The validation of sequential mediation, which supports Hypothesis H9, is among this study's most significant achievements. The findings demonstrate how compensatory consumption patterns are influenced by digital addictions in a cascade: Digital Addiction → Phubbing → Loneliness → Shopping Escapism / Impulsive Buying.

By including digital behavior as an antecedent of emotional distress instead of just traditional stressors, this research expands on the Compensatory Consumption Theory. The study shows that by initially upsetting social interactions and emotional health, contemporary digital habits might indirectly result in maladaptive spending patterns.

5.7 Theoretical Contributions

This research provides multiple theoretical contributions:

- It incorporates phubbing into the literature on compensating consumption, a previously unexamined domain.
- It experimentally substantiates loneliness as a fundamental emotional mechanism connecting digital conduct to consumption.
- It expands Compensatory Consumption Theory to the digital realm, emphasizing how excessive technology use might provoke compensatory purchasing habits.

6. FUTURE IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSION

6.1.1 Practical Implications

The findings suggest that consumers should develop greater awareness of how excessive smartphone use and phubbing behaviors can negatively affect both emotional well-being and financial decision-making. Engaging in mindful smartphone usage and adopting digital detox strategies may help mitigate feelings of loneliness and reduce the likelihood of impulsive spending. By

fostering healthier digital habits, consumers can improve emotional regulation and make more deliberate consumption choices.

Marketers are encouraged to adopt ethical marketing practices and refrain from exploiting consumers' emotional vulnerabilities, particularly those associated with loneliness-driven impulsive buying. Rather than promoting compulsive consumption, brands should emphasize value-based marketing, transparency, and responsible messaging. Such approaches can help build long-term consumer trust while minimizing potential negative psychological and financial consequences for consumers.

Policymakers and educational institutions can play a critical role by developing awareness programs that address digital addiction, phubbing, and emotional well-being. Digital literacy initiatives should emphasize balanced technology use, self-regulation, and the importance of healthy face-to-face social interactions. These efforts can contribute to improved social well-being and more responsible digital engagement across different demographic groups.

6.1.2 Managerial Implications

Managers operating in e-commerce and digital marketing contexts should recognize that excessive digital engagement strategies may generate short-term sales gains but can also lead to long-term consumer dissatisfaction, regret, and diminished brand loyalty. Organizations may benefit from implementing transparent pricing practices, cooling-off periods, and responsible advertising strategies that encourage informed and sustainable consumption behavior.

6.2 Limitations of the study

Despite its contributions, the study is subject to certain limitations.

First, the cross-sectional research design restricts the ability to draw definitive causal inferences among the examined variables.

Second, the sample was limited to young adults in Pakistan, which may affect generalizability.

6.3 Future research directions

Future studies may:

1. Use longitudinal designs to examine changes over time.

2. Explore other emotional mediators such as anxiety, stress, or depression.
3. Test the model in different cultural or demographic contexts.
4. Examine platform-specific effects (e.g., Instagram, TikTok).
5. Investigate moderating variables such as self-control, financial, literacy, or personality traits.

6.4 Conclusion

This study provides a comprehensive explanation of how digital addictions lead to compensatory consumption behaviors through phubbing and loneliness. By extending compensatory consumption theory to the digital domain, research highlights the psychological and social consequences of excessive technology use. The findings underscore the importance of balanced digital engagement to promote emotional well-being and responsible consumer behavior.

References

Al-Busaidi, A. S., Dauletova, V., & Al-Wahaibi, A. (2022). Fear of missing out behaviour: An Indonesian consumer's perspective of food and beverage. AgBioForum, 24(1), 58–69.

Balta, S., Emirtekin, E., Kircaburun, K., & Griffiths, M. D. (2020). Neuroticism, trait fear of missing out, and phubbing: The mediating role of state fear of missing out and problematic Instagram use. International Journal of Mental Health and Addiction, 18(3), 628–639. https://doi.org/10.1007/s11469-018-9959-8

Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, M. D., Andreassen, C. S., & Demetrovics, Z. (2017). Problematic social media use: Results from a large-scale nationally representative adolescent sample. PLOS ONE, 12(1), e0169839. https://doi.org/10.1371/journal.pone.0169839

Błachnio, A., & Przepiórka, A. (2019). Facebook intrusion, fear of missing out, narcissism, and life satisfaction: A cross-sectional study. Psychiatry Research, 273, 513–521. https://doi.org/10.1016/j.psychres.2019.01.073

Blanca, M. J., & Bendayan, R. (2018). Spanish version of the Phubbing Scale: Internet addiction, Facebook intrusion, and fear of missing out as correlates. Psicothema, 30(4), 449–454. https://doi.org/10.7334/psicothema2018.153

Cha, S. S., & Seo, B. K. (2018). Smartphone use and smartphone addiction in middle school students in Korea: Prevalence, social networking service, and game use. Health Psychology Open, 5(1). https://doi.org/10.1177/2055102918755046

Chan, T. K. H., Cheung, C. M. K., & Lee, Z. W. Y. (2022). Impulse buying behaviors in live streaming commerce based on the Stimulus-Organism-Response framework. Information, 12(6), 241. https://doi.org/10.3390/info12060241

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), Modern methods for business research (pp. 295–336). Lawrence Erlbaum Associates.

Chotpitayasunondh, V., & Douglas, K. M. (2016). How "phubbing" becomes the norm: The antecedents and consequences of snubbing via smartphone. Computers in Human Behavior, 63, 9–18. https://doi.org/10.1016/j.chb.2016.05.018

Davey, S., Davey, A., Raghav, S. K., Singh, J. V., Singh, N., Blachnio, A., & Przepiórka, A. (2018). Predictors and consequences of "phubbing" among adolescents and youth in India: An impact evaluation of the "phubbing" phenomenon. Journal of Family & Community Medicine, 25(1), 35–42. https://doi.org/10.4103/jfcm.JFCM_71_17

Elhai, J. D., Levine, J. C., Dvorak, R. D., & Hall, B. J. (2016). Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use. Computers in Human Behavior, 63, 509–516. https://doi.org/10.1016/j.chb.2016.05.079

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39–50. https://doi.org/10.1177/002224378101800104

Franchina, V., Vanden Abeele, M., Van Rooij, A. J., Lo Coco, G., & De Marez, L. (2018). Fear of missing out as a predictor of problematic social media use and phubbing behavior among Flemish adolescents. International Journal of Environmental Research and Public Health, 15(10), 2319. https://doi.org/10.3390/ijerph15102319

Gezgin, D. M., Hamutoglu, N. B., Sezen-Gultekin, G., & Ayas, T. (2019). The relationship between nomophobia and fear of missing out among Turkish university students. Cyberpsychology, Behavior, and Social Networking.

Gökler, M. E., Aydin, R., Ünal, E., & Metintaş, S. (2016). Determining the impact of internet addiction on smartphone addiction. Journal of Mood Disorders, 6(2), 67–73.

Griffiths, M. D. (2013). Social networking addiction: Emerging themes and issues. Journal of Addiction Research & Therapy, 4(5), 118.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139–152.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hato, E. (2013). Fear of missing out (FoMO): A study of the phenomenon and its relationship to social media use [Unpublished master's thesis]. University of Oslo.

Haug, S., Castro, R. P., Kwon, M., Filler, A., Kowatsch, T., & Schaub, M. P. (2015). Smartphone use and smartphone addiction among young people in Switzerland. Journal of Behavioral Addictions, 4(4), 299–307. https://doi.org/10.1556/2006.4.2015.037

Hoch, S. J., & Loewenstein, G. F. (1991). Time-inconsistent preferences and consumer self-control. Journal of Consumer Research, 17(4), 492–507.

Karadağ, E., Tosuntaş, Ş. B., Erzen, E., Duru, P., Bostan, N., Şahin, B. M., Çulha, İ., & Babadağ, B. (2015). Determinants of phubbing, which is the sum of many virtual addictions: A structural equation model. Journal of Behavioral Addictions, 4(4), 60–74. https://doi.org/10.1556/2006.4.2015.005

Kırcaburun, K. (2016). Self-esteem, daily internet use and social media addiction as predictors of depression among Turkish adolescents. Journal of Education and Practice, 7(24), 64–72.

Kline, R. B. (2016). Principles and practice of structural equation modeling (4th ed.). Guilford Press.

Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. International Journal of Environmental Research and Public Health, 14(3), 311. https://doi.org/10.3390/ijerph14030311

Lin, Y.-H., Lin, Y.-C., Lee, Y.-H., Lin, P.-H., Lin, S.-H., Chang, L.-R., ... & Kuo, T. B. (2016). Time distortion associated with smartphone addiction: Identifying smartphone addiction via a mobile application (App). Journal of Psychiatric Research, 65, 139–145.

Maftei, A., & Măirean, C. (2023). Put your phone down! Perceived phubbing, life satisfaction, and psychological distress: The mediating role of loneliness. BMC Psychology, 11(1), 329. https://doi.org/10.1186/s40359-023-01369-0

Maftei, A., & Măirean, C. (2023). Put your phone down! Perceived phubbing, life satisfaction, and psychological distress: The mediating role of loneliness. BMC Psychology, 11, Article 332. https://doi.org/10.1186/s40359-023-01359-0

Mandel, N., Rucker, D. D., Levav, J., & Galinsky, A. D. (2017). The compensatory consumer behavior model: How self-discrepancies drive consumer behavior. Journal of Consumer Psychology, 27(1), 133–146. https://doi.org/10.1016/j.jcps.2016.05.003

Mandel, N., Rucker, D. D., Levav, J., & Galinsky, A. D. (2017). The compensatory consumer behavior model: How self-discrepancies drive consumer behavior. Journal of Consumer Psychology, 27(1), 133–146. https://doi.org/10.1016/j.jcps.2016.05.003

Mendini, M., & Furchheim, P. (2019). Smart consumers or smart addicts? The role of emotional and functional value in compensatory consumption. Journal of Consumer Behaviour, 18(4), 281–296. https://doi.org/10.1002/cb.1768

Mendini, M., & Furchheim, P. (2025). Escaping loneliness through shopping: The role of materialism, impulse buying, and escapism. Journal of Consumer Marketing, 42(3), 257–271. https://doi.org/10.1108/JCM-12-2023-6481

Meral, E. (2017). The relationship between smartphone addiction and social competence [Unpublished master's thesis]. Marmara University.

Milyavskaya, M., Saffran, M., Hope, N., & Koestner, R. (2018). Fear of missing out: Prevalence, dynamics, and consequences of experiencing FoMO. Motivation and Emotion, 42, 725–737.

Mishra, S., et al. (2025). The mediating role of self-esteem in the relationship between loneliness and phubbing: Evidence from a cross-sectional study. International Journal of Environmental Research and Public Health.

Mrad, M., & Cui, C. C. (2020). Comorbidity of compulsive buying and brand addiction: An examination of two types of addictive consumption. Journal of Business Research, 113, 399–408.

Nalwa, K., & Anand, A. P. (2003). Internet addiction in students: A case of concern. CyberPsychology & Behavior, 6(6), 653–656.

Nayak, J. K. (2018). Relationship among smartphone usage, addiction, academic performance and the moderating role of gender: A study of higher education students in India. Computers & Education, 123, 164–173.

Nazir, T., & Bulut, Z. A. (2019). Phubbing and social media addiction. International Journal of Mental Health and Addiction, 18, 1–13.

Nazir, T., & Pişkin, M. (2016). Phubbing: A technological invasion which connects the world but disconnects the relationships. International Journal of Scientific and Research Publications, 6(5), 41–45.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.

O'Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. Journal of Consumer Research, 16(2), 147–157.

Oulasvirta, A., Rattenbury, T., Ma, L., & Raita, E. (2012). Habits make smartphone use more pervasive. Personal and Ubiquitous Computing, 16(1), 105–114.

Özata, Z. (2019). The relationship between smartphone addiction, shyness and loneliness in university students [Unpublished master's thesis]. Near East University.

Panova, T., & Carbonell, X. (2018). Is smartphone addiction really an addiction? Journal of Behavioral Addictions, 7(2), 252–259.

Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. Computers in Human Behavior, 29(4), 1841–1848. https://doi.org/10.1016/j.chb.2013.02.014

Riordan, B. C., Flett, J. A., Hunter, J. A., Scarf, D., & Conner, T. S. (2015). Fear of missing out (FoMO): The relationship between FoMO, alcohol use, and negative alcohol-related consequences in college students. Journal of Psychiatric Research, 62, 99–104. (Note: Cited as 2021 in text, likely refers to Riordan et al. (2018) or similar follow-up).

Roberts, J. A., & David, M. E. (2016). My life has become a major distraction from my cell phone: Partner phubbing and relationship satisfaction among romantic partners. Computers in Human Behavior, 54, 134–141. https://doi.org/10.1016/j.chb.2015.07.058

Roberts, J. A., Yaya, L. H. P., & Manolis, C. (2014). The invisible addiction: Cell-phone activities and addiction among male and female college students. Journal of Behavioral Addictions, 3(4), 254–265.

Rook, D. W. (1987). The buying impulse. Journal of Consumer Research, 14(2), 189–199.

Saunders, M., Lewis, P., & Thornhill, A. (2007). Research methods for business students (4th ed.). Pearson Education.

Sepetçi, F., Özdemir, N. G., & Sever, M. (2021). The relationship between smartphone addiction and fear of missing out: Phubbing as the mediator in students at a university's faculties. Archives of Current Medical Research, 2(1), 1–9.

Shinde, P. R., Varma, K. V., Kumawat, O. I., Mishra, V. R., Lohar, Y. M., & Raut, S. H. (2025). [Article title missing]. [Journal Name Missing]. https://portal.issn.org/resource/ISSN/0253-7214

Stead, H., & Bibby, P. A. (2017). Personality, fear of missing out and problematic internet use and their relationship to subjective well-being. Computers in Human Behavior, 76, 534–540.

Talan, T., Doğan, Y., & Kalınkara, Y. (2023). Relationships between smartphone addiction, academic performance, life satisfaction, hopelessness and cyberloafing among university undergraduate students. Journal of Educational Technology, 19(4), 24–36.

Talan, T., Doğan, Y., & Kalinkara, Y. (2024). Effects of smartphone addiction, social media addiction, and fear of missing out on university students' phubbing: A structural equation model. Deviant Behavior, 45(1), 1–14. https://doi.org/10.1080/01639625.2023.2235870

Thompson, C. J., Locander, W. B., & Pollio, H. R. (1990). The lived meaning of free choice: An existential-phenomenological description of everyday consumer experiences of contemporary married women. Journal of Consumer Research, 17(3), 346–361.

Tutgun Ünal, A. (2015). Social media addiction: A research on university students [Unpublished doctoral dissertation]. Marmara University.

Ünalan, D., & Yıldırım, A. (2020). The relationship between social media addiction and phubbing behaviors in university students. Journal of Dependence, 21(2), 115–123.

Wang, P., Wang, X., Nie, J., Zeng, P., Liu, K., Wang, J., ... & Lei, L. (2021). Envy and problematic smartphone use: The mediating role of FOMO and the moderating role of student-student relationship. Personality and Individual Differences, 170, 110466.

APPENDIX A: RESEARCH QUESTIONNAIRE

Assessment of Digital Addiction and Consumption Tendencies

This questionnaire is part of an MBA research study examining how **digital addiction**—including smartphone use, social media engagement, fear of missing out (FoMO), and online behaviors—affects individuals' psychological well-being and consumption tendencies.

Your participation is **voluntary and anonymous**. The survey takes approximately **5–7 minutes** to complete and is used **solely for academic and research purposes**. There are **no right or wrong answers**; please respond honestly based on your personal experience.

Thank you for your valuable contribution.

All questions marked with () are required. *****

Section A: Demographic Information

1. **Gender***

   ☐ Male

   ☐ Female

2. **Age Group***

   ☐ Below 18

   ☐ 18–25

   ☐ 25–30

   ☐ 30–35

   ☐ 35 and above

3. **Educational Level***

   ☐ Intermediate or below

   ☐ Bachelor's degree

   ☐ Master's degree

   ☐ Other

4. **Approximate Social Media Use (hours per day)***

   ☐ 0–3

   ☐ 3–6

   ☐ 6–9

   ☐ 9–11

   ☐ 11+

Section B: Social Media Addiction

Please indicate your level of agreement with the following statements.

Scale:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

1. I check my social media accounts even when I have other important tasks to do.
2. I check my social media accounts whenever possible.
3. I frequently share my activities or moments on social media.
4. I follow trending topics, popular videos, and online activities.
5. I regularly check the social media profiles of people I know.
6. I also check the profiles of people I do not personally know.
7. I prefer communicating with friends via social media rather than face-to-face.
8. I wonder whether my friends have read or reacted to my posts.
9. I follow daily news and current affairs through social media.
10. I prefer using social media over watching television.

Section C: Smartphone Addiction

Please indicate your level of agreement with the following statements.

Scale:

1 = Strongly Disagree | 2 = Disagree | 3 = Slightly Disagree | 4 = Slightly Agree | 5 = Agree | 6 = Strongly Agree

1. I postpone important tasks because of smartphone use.
2. I have difficulty focusing on work or studies due to smartphone use.
3. I experience physical discomfort (e.g., neck or wrist pain) from smartphone use.
4. I feel uncomfortable when I do not have my smartphone with me.
5. I become impatient or irritable when I cannot use my smartphone.
6. Even when not using it, my smartphone is often on my mind.
7. I continue using my smartphone even when it disrupts my daily life.
8. I constantly check my smartphone so I do not miss online interactions.
9. I use my smartphone for longer than I intend to.
10. People around me complain about my excessive smartphone use.

Section D: Fear of Missing Out (FoMO)

Please indicate your level of agreement with the following statements.

Scale:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

1. I fear that others are having more rewarding experiences than me.
2. I worry that my friends are enjoying life more than I am.
3. I feel anxious when I learn that my friends had fun without me.
4. I feel uneasy when I do not know what my friends are doing.
5. Understanding inside jokes and shared conversations among friends is important to me.
6. I spend too much time keeping up with what is happening online.

7. Missing opportunities to meet my friends upsets me.
8. When I have a good experience, I feel the need to share it online.
9. Missing planned gatherings makes me feel distressed.
10. Even while on vacation, I follow what my friends are doing.

Section E: Phubbing Behavior

Please indicate your level of agreement with the following statements.

Scale:
1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

1. My attention often shifts to my phone when I am with others.
2. I am frequently busy using my phone when spending time with friends.
3. People complain about my mobile phone use.
4. I stay engaged with my phone even during social interactions.
5. I do not believe my phone use annoys people around me.
6. My phone is always within my reach.
7. Checking my phone is the first thing I do after waking up.
8. I feel incomplete without my mobile phone.
9. My mobile phone usage has increased over time.
10. My social, personal, or professional time has decreased due to phone use.

Section F: Loneliness

Please indicate how often you experience the following feelings.

Scale:
1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

1. I lack companionship.

2. There is no one I can turn to.
3. I am an outgoing person. *(Reverse-coded)*
4. I feel left out.
5. I feel isolated from others.
6. I can easily find companionship when I want it. *(Reverse-coded)*
7. I feel unhappy because I am withdrawn.
8. People are around me, but I still feel alone.

Section G: Shopping Escapism

Please indicate your level of agreement with the following reasons for shopping.

Scale:
1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

1. I shop to avoid thinking about my problems.
2. I shop to distract myself from things that bother me.
3. I shop to escape from reality for a while.
4. Shopping helps me forget about daily stress.
5. I shop to feel relief from everyday worries.
6. I shop to take a mental break from routine life.

Section H: Impulsive Buying

Please indicate your level of agreement with the following statements.

Scale:
1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

1. I buy things that I did not plan to purchase.
2. I make unplanned purchases.

3. When I see something interesting, I buy it without considering the consequences.
4. I find spontaneous buying enjoyable.
5. I usually avoid buying items that are not on my shopping list. *(Reverse-coded)*