

**Fear of Missing Out, Perfectionism and Cognitive Distortions Among Young  
Adults**

*Dissertation Submitted to University of Kerala*

*In partial fulfillment of the requirements for the award of the Degree of  
M.Sc. Counselling Psychology*



Department of Counselling Psychology

Loyola College of Social Sciences (Autonomous)

Affiliated to University of Kerala

Accredited with A++ by NAAC

Thiruvananthapuram

2023 - 2025

**Fear of Missing Out, Perfectionism and Cognitive Distortions Among Young  
Adults**

*Dissertation Submitted to University of Kerala*

*In partial fulfillment of the requirements for the award of the Degree of  
M. Sc. Counselling Psychology*

**by**

Annie Benild

60423115004



Department of Counselling Psychology  
Loyola College of Social Sciences (Autonomous)  
Thiruvananthapuram

2023 - 2025

## Certificate



This is to certify that Annie Benild, a student of fourth semester M.Sc Counselling Psychology has satisfactorily completed the dissertation on the paper entitled - **“Fear of Missing Out, Perfectionism and Cognitive Distortions Among Young Adults”** under the guidance of Dr. Ammu Lukose, in partial fulfillment of the requirement for the award of the Degree of M.Sc. Counselling Psychology, at Loyola College of Social Sciences (Autonomous), affiliated to the University of Kerala.

Dr. Ammu Lukose

Dissertation Guide

Dr. Ammu Lukose

Assistant Professor & Head of Department

(In-charge)

Submitted for the examination held on:

Examiners:

### **Declaration**

I Annie Benild, do hereby declare that this research entitled "**Fear of Missing Out, Perfectionism and Cognitive Distortions Among Young Adults**" is a bonafide record of the research work done by me under the guidance of **Dr. Ammu Lukose** , Head of the Department (In-charge) , **Loyola College of Social Sciences (Autonomous)**. I further declare that this research or any part of this has not been submitted for any degree, diploma, or any other University or Institution.

Annie Benild

Place: Thiruvananthapuram

Date:

Submitted for the examination held on:

## **Acknowledgement**

The success and outcome of this dissertation required a lot of guidance and assistance from many people and i'm extremely privileged to have gotten this all along the completion of my dissertation. All that i have done is only due to such supervision and assistance and i would not forget to thank them.

I respect and thank Dr. Ammu Lukose, head of the Counselling Psychology Department (In-charge), for providing me with an opportunity to do the dissertation work in Loyola College of Social Sciences, Thiruvananthapuram, and for giving me all support and guidance, which made me complete the dissertation duly. I'm extremely thankful to her for providing such nice support and guidance.

I owe deep gratitude to my dissertaion guide Dr. Ammu Lukose, who took a keen interest in my dissertation work and guided me all along, till the completion of the work by providing the all-necessary information for developing a good system.

I heartily thank all teaching staff of the Counseling Psychology department for their guidance and suggestions during this dissertation work.

I'm thankful for and fortunate enough to get constant encouragement, support, and guidance from all my friends and family which helped me in completing my dissertation work.

Thank you all

## **Abstract**

The purpose of the study was to investigate the association between Fear of Missing Out (FoMO), perfectionism and cognitive distortions in young adults. Two hundred and fifty three participants were selected using convenience sampling. Psychological assessment tools such as fear of missing out scale, short almost perfect scale - revised and cognitive distortions questionnaire - short form were used for testing the participants. Initial analysis revealed that none of the three variables were normally distributed; therefore, non-parametric tests were used. Results indicated a significant, moderate positive correlation between FoMO and cognitive distortions but not between FoMO and perfectionism, nor between cognitive distortions and perfectionism. Additionally, exploratory analyses were conducted to assess gender differences. Female participants were identified to score significantly higher on cognitive distortions than males. Regression analysis supported that FoMO predicted cognitive distortions significantly, not perfectionism. Mediation analysis with the Baron and Kenny procedure revealed that perfectionism did not mediate the association between FoMO and cognitive distortions. In addition, people who scored high on FoMO also had significantly higher levels of cognitive distortions than people who scored low on FoMO. The results suggest that maladaptive thinking styles are influenced by FoMO underscoring the need for early cognitive interventions targeting FoMO-related thought patterns among young adults.

*Keywords: Fear of being left out, Perfectionism, Distorted thinking patterns, Young Adults*

## Table of Contents

Chapters	Title	Page No.
1	Introduction	1
2	Review of Literature	13
3	Method	46
4	Results and Discussion	60
5	Summary and Conclusion	74
	References	79
	Appendices	91

## List of Tables

No.	Table title	Page No.
4.1	Tests of Normality for Study Variables	61
4.2	Correlation between FoMO and Perfectionism	62
4.3	Correlation between Perfectionism and Cognitive Distortions	63
4.4	Correlation between FoMO and Cognitive Distortions	64
4.5	Gender Differences in FoMO	64
4.6	Gender Differences in Perfectionism	65
4.7	Gender Differences in Cognitive Distortions	66
4.8	FoMO predicting Cognitive Distortions	67
4.9	FoMO predicting Prefectionism	68
4.10	FoMO and Cognitive Distortions predicting Perfectionism	69
4.11	Perfectionism as a Mediator between FoMO and Cognitive Distortions	69
4.12	Cognitive Distortions: High vs Low FoMO Groups	71
4.13	Perfectionism: High vs Low FoMO Groups	72
4.14	Perfectionism Subscales: High vs Low FoMO Groups	73



## **List of Appendix**

---

<b>No.</b>	<b>Appendices</b>
<hr/>	
1	Informed Consent Information and Participant Consent Form
2	Socio-Demographic Details
3	Fear of Missing Out Scale
4	Short Almost Perfect Scale - Revised
5	Cognitive Distortions Questionnaire - Short Form

---

## **Chapter 1**

### **Introduction**

Mental health difficulties in young adults are on the rise worldwide, particularly in environments where social comparison, achievement pressure, and digital dependency are high. In today's hectic, hyperconnected world, the co-occurrence of psychological constructs such as Fear of Missing Out (FoMO), Perfectionism, and Cognitive Distortions presents a fascinating perspective from which to study the emotional difficulties of modern youth. These constructs each having their own impact can synergize and result in emotional distress, depressed self-esteem, and maladaptive behaviors. Knowledge of their interaction is critical to the development of resilience and good mental health in the youth, especially during transitional phases of life like adolescent to early adulthood.

### **1.1 Fear of Missing Out (FoMO)**

The expression Fear of Missing Out, or FoMO, was first noticed by Przybylski et al. (2013), who defined it as: "a pervasive apprehension that others might be having rewarding experiences from which one is absent," combined with "a desire to stay continually connected with what others are doing" (Przybylski et al., 2013, p. 1841).

This anxiety is compounded by digital technologies, specifically social media, where people are often subjected to staged pictures of friends celebrating vacations, accomplishments, or life milestones. Such settings leave people with: "lower psychological need satisfaction, mood, and life satisfaction," as well as "greater engagement with social media" (Przybylski et al., 2013).

FoMO is not only a social phenomenon but also a motivational and affective construct based on Self-Determination Theory. Autonomous, competence, and relatedness are deemed to be basic psychological needs as per this theory. Przybylski et al. (2013)

concluded that people with unsatisfied psychological needs experience greater levels of FoMO and greater desire for digital connectedness.

In India, where smartphone penetration among young people is more than 93% (Statista, 2024), FoMO is now a rising issue. According to a study by Oberoi et al. (2022), 68% of urban university students use social media as soon as they wake up, mainly because they don't want to miss any updates. Such compulsive usage has been linked with anxiety, sleep problems, and cognitive overload.

Culturally, the collectivist nature of Indian society can further accentuate FoMO. With increased focus on belonging, family pride, and peer visibility, young Indians are extremely sensitive to exclusion from social groups. Happenings like weddings, academic achievements, or professional breakthroughs are often exhibited online, increasing social comparison and evoking feelings of inadequacy among observers.

Elhai et al. (2016) also illustrated the connection between FoMO and inadequate mental health: "FoMO significantly predicted problematic smartphone use, particularly when mediated by anxiety symptoms."

This positions FoMO as both an effect and a causative agent of emotional distress, and thus a critical area for investigation in young people's psychology.

## **1.2 Perfectionism**

Perfectionism has long been considered a personality attribute but is more and more regarded as a multi-dimensional construct with adaptive as well as maladaptive aspects. Frost et al. (1990) describe perfectionism as: "the setting of excessively high standards for performance accompanied by overly critical self-evaluations."

Their Multidimensional Perfectionism Scale (FMPS) captures important dimensions like concern over errors, parents' expectations, uncertainty about actions, and order.

Although perfectionism in some ways can stimulate motivation and accomplishment, research consistently indicates that maladaptive perfectionism is correlated with emotional disturbance and ineffective coping. Maladaptive perfectionism is more related to psychological distress, including depression, anxiety, eating disorders, and suicidal ideation. According to Flett and Hewitt (2002):

This is most true among students and young professionals, where achievement tends to be synonymous with self-worth. The Indian education system itself, with its competitive and examination-oriented culture, puts enormous pressure on students to excel without making mistakes. Consequently, many students internalize perfectionistic ideals and experience the fear of failure.

Research conducted by Singh & Kaur (2021) of Indian students at universities concluded that: "A significant relationship exists between socially prescribed perfectionism and academic burnout, with emotional exhaustion acting as a mediating factor."

This proves that the need to live up to high external demands can contribute to fatigue, self-doubt, and disengagement from learning. Furthermore, gendered expectations, family pressure, and failure to get psychological support in Indian institutions make the situation even more complex.

In real-life scenarios, perfectionists may struggle with tasks due to fear of not meeting unrealistic standards. They are prone to procrastination, avoidance, and excessive reassurance-seeking. Even minor setbacks may lead to cognitive collapse, reinforcing a belief that they are inadequate or incapable.

### 1.3 Cognitive Distortions

Cognitive Distortions are chronic, inaccurate styles of thinking that distort perceptions and lead to emotional upset. Aaron T. Beck (1967), in his Cognitive Theory of Depression, initially identified and formalized these styles of distorted thinking. He characterized them as: "systematic errors in reasoning that lead individuals to perceive reality inaccurately, often negatively" (Beck, 1967).

Beck's distortions list consists of all-or-nothing thinking, overgeneralization, catastrophizing, personalization, and mental filtering. These habits are now part of Cognitive Behavioral Therapy (CBT), one of the most commonly practiced psychological treatment models.

As Verywell Mind (n.d.) states: "Cognitive distortions affect our level of stress and ability to cope with everyday problems, and are the focus of major emphasis in cognitive-behavioral therapy (CBT)."

These distorted patterns are common among those with perfectionistic tendencies. They will, for instance, catastrophize by thinking that a bad grade will spoil their whole academic life. Likewise, people with FoMO will mentally filter, focusing only on what they do not have compared to others, thus enhancing feelings of inadequacy.

Within a digitally crowded atmosphere, such distortions are amplified by algorithmic content presenting idealized lifestyles. The contrast between one's actual life and others' idealized digital highlight can evoke distortions such as emotional reasoning ("I feel excluded, so I must be unorthy") and selective abstraction ("Everyone else is happier than me").

These thought patterns are not abstractions; they have concrete implications for behavior, emotional strength, and identity. Evidence indicates that these distortions are strongly correlated with depression, worry, and low self-esteem (Beck, 1976;

Burns, 1980). While these variables have been examined singly in the past, new evidence indicates a substantial overlap and compounding effect among them, particularly among younger adult samples.

FoMO and perfectionism are both externally validated and socially comparative. Social media, in particular, are a rich ground for perfectionists to compare themselves to others. Permanent exposure to peer success can create FoMO, particularly when people feel they do not measure up to societal expectations.

Research by Milyavskaya et al. (2018) found: "People who were high in self-critical perfectionism reported more social comparison, which was associated with more FoMO and less emotional well-being." This implies that perfectionism can be an antecedent for FoMO, and online platforms only give it more traction. It is the fear of falling behind or not being viewed as successful that drives the perfectionist, creating a vicious cycle of emotions.

Maladaptive perfectionism tends to be founded on cognitive distortions. As Shafran & Mansell (2001) observed: "Perfectionism can be sustained by dysfunctional assumptions, such as 'If I make an error, I am a failure,' which are typical cognitive distortions." These cognitive distortions not only impact mood but also influence behavior. For example, a student who holds the irrational belief that only an ideal outcome is okay might resist initiating an assignment for fear of failure, which results in procrastination and, ultimately, emotional exhaustion. With repetition, these distortions perpetuate self-doubt and mental weariness.

Individuals experiencing FoMO may exhibit distorted perceptions of their own lives. For example, a person may see photos of peers attending events and interpret it through all-or-nothing thinking "I wasn't invited, so I have no friends" even if it's an isolated incident. Such thinking increases feelings of loneliness and rejection.

As per Oberst et al. (2017): "FoMO mediates the relationship between online social comparison and depressive symptoms, largely through biased cognitive evaluations of one's social life."

Therefore, the relationship between FoMO and cognitive distortions is not serendipitous, it is reciprocal. One reinforces the other, forming a feedback loop of dissatisfaction, anxiety, and self-blame.

These three constructs create a self-perpetuating triangle: perfectionism results in FoMO, which sets off cognitive distortions, which then reinforce perfectionistic ideation. This is a psychological trap that is hard to break without help. In a lot of young adults, particularly in high-achieving or high-stress settings, the cycle becomes integral to their identity and everyday life.

The interrelatedness of Fear of Missing Out, Perfectionism, and Cognitive Distortions unveils a multifaceted psychological structure ruling emotional well-being in the digital era. The constructs overlap in theory as well as mutually reinforce each other in practice, leading to anxiety, stress, and discontent. Their influence is strongly felt in the Indian context, where cultural expectations, academic competitiveness, and cyber exposure condition the emotional life of young people.

By examining these three variables in combination, the current investigation seeks to gain a fuller understanding of the psychological difficulties confronting young adults today. It also aspires to be informative for future interventions in school and clinical settings, assisting individuals in ending the cycle of unrealistic expectations, social comparison, and distorted thinking.



### **1.4 Statement of the Problem**

In today's increasingly connected world, young adults are exposed to constant streams of information, peer achievements, and societal expectations through social media and other digital platforms. While technology offers several advantages, it has also intensified psychological stressors especially those related to self-comparison, achievement pressure, and cognitive overload.

Fear of Missing Out (FoMO) has emerged as a modern psychological phenomenon rooted in a persistent anxiety of being excluded from rewarding experiences. This fear is amplified by the curated and often idealized portrayals of others' lives on social media. Simultaneously, Perfectionism, particularly in its maladaptive form, continues to affect students and young professionals who feel the constant need to perform flawlessly and meet unrealistic standards set by themselves or others. Cognitive Distortions, such as all-or-nothing thinking, catastrophizing, and overgeneralization, further complicate this situation by influencing how individuals interpret everyday events and setbacks, often in negative and self-defeating ways.

Though these three psychological constructs have been studied independently, very few studies have attempted to explore how they interrelate especially within the context of young adults navigating social, academic, and professional transitions. The overlap between FoMO, perfectionism, and cognitive distortions suggests a deeper psychological pattern that could have long-term implications on mental health, decision-making, and self-worth.

In the Indian context, there is a growing concern about the mental health of youth, with rising cases of anxiety, stress, and digital overuse. However, there is limited empirical research examining how the need for social inclusion, performance pressure, and distorted thinking together influence psychological well-being. This lack of

integrated understanding creates a gap in developing effective psychological interventions or preventive programs for young adults in academic or work settings.

Hence, it is important to explore how these three variables are related to one another and whether one influences or mediates the other. Understanding these dynamics will help identify at-risk individuals and design targeted mental health strategies. The current study aims to fill this gap by investigating the relationship between fear of missing out, perfectionism, and cognitive distortions among young adults.

### **1.5 Need and Significance of the Study**

In the era of social media and incessant pressure from society, youth are finding themselves increasingly afflicted by mental health issues that are not only a result of external experiences but also how these events are being perceived and dealt with. With the accelerated development of internet connectivity, particularly among scholars and young professionals, people are subject to round-the-clock social comparison and performance metrics. This new context calls for an increased study of psychological processes that drive emotional health.

Fear of Missing Out (FoMO) is now an extensive culture among youth, particularly because of their extensive usage of websites such as Instagram, WhatsApp, and Facebook. FoMO creates a constant need to stay engaged and connected at all times, which leads to anxiety, depressed self-esteem, and a lot of screen time. Przybylski et al. (2013) established in a study that people who score high on FoMO show lower life satisfaction and more social media usage. In India, the situation is more alarming, with studies noting that over 65% of urban students feel anxious when disconnected from their digital devices (Oberoi et al., 2022).

At the same time, perfectionism, particularly its maladaptive form—is being increasingly observed among youth. Students often face immense academic and social pressure to excel, driven by internal and external expectations. Indian education, through its highly competitive entrance exams, grading of performance, and aggressive peer competition, is partly responsible for this. Singh and Kaur (2021) suggest that socially prescribed perfectionism correlates strongly with academic burnout and emotional exhaustion among Indian students. The social idealization of "being the best" causes numerous youth to have an unhealthy self-concept and fear of failure.

Additionally, people high in FoMO or perfectionism tend to use cognitive distortions irrational or negatively slanted patterns of thought that warp reality. Some of these include catastrophizing ("If I fail, everything will be destroyed"), all-or-nothing thinking ("If I'm not the best, I'm a failure"), and mental filtering ("Everyone else is happier than me"). These mental mistakes not only jeopardize emotional well-being but also lower coping ability, rendering adolescents more susceptible to depression, stress, and anxiety (Verywell Mind, n.d.; Beck, 1967).

Even after separate research on these factors, not many scholars have examined the relationship between these three factors, especially in the case of Indian youth. This omission is important since it is less likely that these factors are acting independently. For example, FoMO can cause an individual to seek unattainable objectives (perfectionism), and these failures can precipitate distorted thinking. On the other hand, one who is already prone to thinking in distorted patterns might be more vulnerable to FoMO and perfectionism. If mental health professionals gain insight into this triangular interaction, then diagnosing and addressing contemporary psychological problems will become easier.

The value of this research is that it uses an integrated approach. By looking at the link between FoMO, perfectionism, and cognitive distortions, the research tries to get across a cognitive-emotional model that may describe some types of psychological distress among young adults. This knowledge can add to the expanding amount of psychological literature and also provide practical applications. Practical significance encompasses;

- Recognizing vulnerable youth through identification of cognitive and behavioral profiles.
- Adapting psychological counseling and cognitive-behavioral methods to meet the inter-correlated nature of these concerns.
- Assisting teachers, counselors, and decision-makers at schools and universities in identifying and addressing developing trends in student mental health.
- Contributing to the sparse literature on perfectionism, FoMO, and cognitive distortion among Indian youth.

Moreover, this research gives strength to the increasing focus on mental health literacy in India. With counseling and therapy still perceived as taboo, knowledge of how prevalent thinking and behavioral patterns lead to distress can help make it acceptable to seek psychological assistance. The findings of this study may also prove beneficial when planning workshops, support groups, and awareness programs in educational institutions.

This research is timely and urgent. It addresses an acute mental health requirement among young people and aims to offer more in-depth psychological understanding of how digital habits, personality types, and thought patterns cumulatively contribute to well-being.

## **1.6 Objectives**

1. To examine the relationship between FoMO and perfectionism among young adults.
2. To examine the relationship between perfectionism and cognitive distortions.
3. To examine the relationship between FoMO and cognitive distortions.

## **1.7 Hypotheses**

H1: There will be a significant positive relationship between FoMO and perfectionism.

H2: There will be a significant positive relationship between perfectionism and cognitive distortions.

H3: There will be a significant positive relationship between FoMO and cognitive distortions.

## **Chapter 2**

### **Review of Literature**

## **2.1 Theoretical Review**

In order to comprehend the psychological underpinnings of Fear of Missing Out (FoMO), Perfectionism, and Cognitive Distortions, it is critical to explore conceptual frameworks and theories that elucidate the development, interconnectedness, and impact of these variables, especially among young adults. The present section summarizes the salient theoretical views that underlie each of the variables constituting the current research.

### ***2.1.1 Fear of Missing Out (FoMO)***

#### **• *Self-Determination Theory***

Self-Determination Theory (Deci & Ryan, 1985; 2000) provides a strong theoretical framework to explain the psychological processes behind FoMO. SDT posits that individuals have three universal psychological needs: autonomy, competence, and relatedness. When the need for relatedness is not satisfied, people tend to develop a chronic worry of being excluded from important experiences. FoMO emerges as a compensatory strategy to this unsatisfied need, which gives rise to compulsive social media use and comparison. Among adolescents, developmentally attuned to peer acceptance and social belongingness, FoMO emerges as a strong psychological phenomenon based on the desire for belonging and fear of exclusion.

#### **• *Social Comparison Theory***

Social Comparison Theory (Festinger, 1954) suggests that people judge their own status, success, and happiness by comparing themselves against others. With the technology of today, this comparison is often done on social network sites, where others' lives are presented in a staged way that leads to feelings of inadequacy and

exclusion. FoMO is also very related to upward social comparisons, where one views others as being in a superior or more enjoyable position, thus resulting in anxiety, self-doubt, and a compulsive urge to remain connected. This theory is able to account for the psychological susceptibility of young adults to FoMO, as they have constant online engagement and identity experimentation at this phase of life.

### ***2.1.2 Perfectionism***

#### **• *Multidimensional Model of Perfectionism***

The Multidimensional Model of Perfectionism (Hewitt & Flett, 1991) envisions perfectionism as having three central dimensions:

1. Self-oriented perfectionism: Establishing excessively high personal expectations and an aspiration for flawlessness.
2. Other-oriented perfectionism: Expecting unrealistically high standards from others.
3. Socially prescribed perfectionism: The feeling that others are expecting one to be perfect.

Of these, socially prescribed perfectionism is especially pertinent to young adults, who are likely to internalize the expectations of society and peers and thus boost psychological distress and susceptibility to non-adaptive thinking. Perfectionism, when extreme and rigid, typically correlates with anxiety, fear of mistakes, and inadequate self-esteem.

#### **• *Cognitive-Behavioral Theory of Perfectionism***

Cognitive-Behavioral Theory of Perfectionism (Shafran, Cooper, & Fairburn, 2002) suggested that perfectionism has its roots in core beliefs of self-worth being contingent on success. Perfectionistic individuals tend to exhibit all-or-nothing



thinking, overgeneralization, and harsh self-criticism. These cognitive distortions perpetuate and support perfectionistic thinking and make the individual more inclined to pursue activities that lead to stress, procrastination, and discontent, especially in high-achieving adolescents.

### ***2.1.3 Cognitive Distortions***

#### **• *Cognitive Theory of Depression***

Aaron Beck's Cognitive Theory of Depression (Beck, 1967) forms the theory on which cognitive distortions can be understood. In this theory, experiences are construed through aversive cognitive schemas, thus resulting in distorted ways of thinking. Automatic thoughts are mostly composed of logical errors, e.g., catastrophizing, personalization, and mind-reading. Cognitive distortions are involved in developing and sustaining different emotional disorders and are most common during the process of identity development and social pressure, hence are particularly significant among young adults.

#### **• *Cognitive-Behavioral Model***

The Cognitive-Behavioral Model (Beck, 1976) focuses on the interrelated and ongoing exchange between thoughts, feelings, and actions. Thought distortions, as irrational or distorted patterns of thinking, affect emotional control and behavioral reactions. For example, an emerging adult suffering from FoMO might catastrophize about being left out of a social gathering and become anxious and overly involved with digital technology. In the same vein, a perfectionist student may indulge in all-or-nothing thinking, perceiving a small error as a total failure, promoting stress and

self-blame. These distorted patterns tend to go unnoticed unless challenged through cognitive restructuring or therapeutic treatment.

## **2.2 Empirical Review**

In order to comprehend the constructs of Fear of Missing Out (FoMO), Perfectionism, and Cognitive Distortions in young adults and their interrelationship, it was crucial to conduct a review of the current literature. The empirical review is a detailed overview of past research findings and academic studies pertinent to the current study, explaining how these psychological factors relate to one another and manifest within young adult populations.

### ***2.2.1 Studies on Fearing of Missing Out***

Kareem and Al-Munif (2024) conducted a study to explore the impact of the interaction between Fear of Missing Out (FoMO) and rumination on increasing the levels of social anxiety and excessive use of social media among university students. The study was conducted on a sample of 423 university students, utilizing the following scales: FoMO scale (2024), Social Anxiety Scale (2015), Ruminative Thought Styles Questionnaire (RTSQ) (2009). The study found the following results: There is a statistically significant positive correlation between Fear of Missing Out (FoMO) and social anxiety, with a correlation coefficient of (0.635), significant at the 0.01 level. There is a statistically significant positive correlation between Fear of Missing Out (FoMO) and excessive use of social media, with a correlation coefficient of (0.730), significant at the 0.01 level. There is a statistically significant positive correlation between rumination and social anxiety, with a correlation coefficient of (0.567), significant at the 0.01 level. There is a statistically significant positive

correlation between rumination and excessive use of social media, with a correlation coefficient of (0.824), significant at the 0.01 level. There is a significant interaction between FoMO and rumination on social anxiety, with the F-values indicating that the interaction has a significant effect at the 0.01 level. The model highlights that FoMO and rumination are key psychological factors that, when interacting, contribute to the overuse of social media platforms among individuals. This interaction indicates that those experiencing higher levels of both FoMO and rumination are more likely to engage in excessive social media usage, which is statistically significant at the 0.01 level.

Srivastava, Rishi and Belwal (2024) conducted a study to understand the association between the fear of missing out (FOMO) and its impact on psychological well-being (PWB). The mediating effect of anxiety and moderating effects of social media engagement (SME) and resilience on the association mentioned above are also examined. The study used a mix of attachment theory and cognitive-motivational-relational theory to understand the hypothesized relationship using a diverse sample of international respondents from South Asia, South East Asia and the Middle East. The data from 612 respondents was collected using SurveyMonkey. The authors have used Hayes' PROCESS Macro to test the hypothesised relationships. The results revealed that anxiety acts as a mediator between FOMO and PWB, while SME and resilience act as moderators in reducing the impact of FOMO on anxiety and the impact of anxiety on PWB, respectively. The work extends the existing theorization and points out the merits of using SME and resilience as moderators and anxiety as a mediator for understanding the association between FOMO and PWB.

Zhang, Shang and Tian (2023) carried out a meta-analysis considering the correlation between FoMO and mobile phone addiction in cross-cultural settings. The data

involved aggregated numbers from several studies with diverse samples, thus offering a wide and generalizable data point. Even though the paper did not concentrate on a particular tool, it combined results using a range of validated instruments for both FoMO and mobile phone addiction. The findings showed a positive and robust relationship between FoMO and phone addiction. The authors concluded that the relationship is robust and significant across cultural background. The findings add to the current study by affirming that FoMO is a critical contributor to maladaptive behavior among youth, which could comorbidity with vulnerabilities in cognition and emotion.

Henrici and Oberst (2023) concentrated on the emotional and motivational traits of those with high FoMO. The subjects were adults, although not particular demographic information was provided. With self-report emotional needs and social connectedness scales combined, the researchers indicated that "those scoring high in FoMO expressed ubiquitous worry augmented by intense longing for engagement." FoMO was concluded to represent emotional worry as well as a strong desire for social belonging. Both of these aspects of FoMO—emotional and motivational—underpin its relationship to cognitive styles like personalization, catastrophizing, and overgeneralization, which is the focus of the present study.

Elhai, Yang and Montag (2021) examined the theoretical foundations of FoMO based on Self-Determination Theory (SDT) as the model. Instead of gathering new information, the research was conceptual. The authors highlighted that "FoMO can be conceived within SDT as a negative affective state occurring as a result of an individual's relatedness needs being unfulfilled." This conceptualization implies that FoMO arises due to non-fulfillment of social connection and belonging needs. The implication is that those who score high on FoMO would tend to experience

dysregulation of emotions and compensatory processes, like perfectionism or distorted cognition. This research provides theoretical backing for analyzing the interaction between FoMO, perfectionism, and cognitive distortion among young adults.

Varchetta et al, (2020) provided insights into framework of attitudes and behaviors related to the use of the social network in young university students. In this study, the sample was composed to 306 Italian university students aged 18 to 30 (152 women; mean of age = 21.8; standard deviation = 3.19) who responded to an online survey regarding their SNS behaviors, Fear of Missing Out (FOMO), Basic Psychological Needs, Self-Esteem and Online Vulnerability. Correlations analysis showed a positive relationship between FOMO, Online Vulnerability, and Social Media Addiction. The results showed that women have a higher level of Social Media Addiction and the Need for Relatedness. The regression analysis showed that FOMO is the best predictor of Social Media Addiction. Implications of the findings in the educational field are discussed.

Elhai et al, (2020) a model of psychopathology variables, age and sex as correlates of problematic smartphone use (PSU) severity using supervised machine learning in a sample of Chinese undergraduate students. A sample of 1097 participants completed measures querying demographics, and psychological measures of PSU, depression and anxiety symptoms, fear of missing out (FOMO), and rumination. They used several different machine learning algorithms to train our statistical model of age, sex and the psychological variables in modeling PSU severity, trained using many simulated replications on a random subset of participants, and externally tested on the remaining subset of participants. Results from the training subset generalized to the test subset, without substantial worsening of fit using traditional fit indices. FOMO

had the largest relative contribution in modeling PSU severity when adjusting for other covariates in the model. Results emphasize the significance of FOMO to the construct of PSU.

Dempsey et al. (2019) investigated the differential functions of FoMO and rumination in problematic use of smartphones. The participants were university students (number not specified). They used scales to assess FoMO, rumination, and smartphone addiction. Results showed that both FoMO and rumination were positively correlated with emotional distress and compulsive phone use. The authors concluded that these cognitive-emotional processes might feed into each other and heighten the risk for technology dependence. This is highly applicable to the present study because it proposes that FoMO can be concurrently present with and even exacerbate maladaptive thinking patterns like cognitive distortions.

Franchina et al, (2018) investigated the effect of FoMO on social media addiction and "phubbing" (snubbing people to attend to one's phone). The participants were adolescents, although the sample number was not specified. The researchers used a short, four-item version of the original FoMO scale. The results showed that higher FoMO was strongly linked with more frequent phubbing behavior and more time spent on social networking. The study concluded that FoMO is a main predictor of disturbed real-life social contact. These findings are relevant to this study because they point out how FoMO can spur social comparison and justify perfectionistic activities based on distorted assumptions about self-worth.

Browne et al,(2018) aimed to compares and validates measures of the "fear of missing out" (FoMO). They administered two measures of the fear of missing out (FoMO Abel & FoMOPrzy), the Positive and Negative Affect Scales (PANAS), the Need to Belong Scale (NBS), the Rejection Sensitivity Questionnaire (RSQ), the Acceptance

and Action Questionnaire – II (AAQ-II), and the Entertainment-Social subscale of the Celebrity Attitude Scale (CAS ES) to 286 university students to determine how well scores on each scale would correlate with scores on the two measures of FoMO. They found that scores on all but the CAS ES correlated significantly with scores on both FoMO scales. Results support construct validity for both FoMO scales, although one measure appears to provide a more specific assessment of the fear of missing out.

Milyavskaya, Reznick, and Koestner (2018) investigated the link between psychological need satisfaction and FoMO through the perspective of Self-Determination Theory. The sample was university students, but the number was not mentioned. Measures of need satisfaction and FoMO were filled out by the participants. The authors identified that "psychological need satisfaction plays a significant role in motivation, well-being, and FoMO." The research established that those whose autonomy, competence, and relatedness needs are not met are likely to develop FoMO and emotional distress. This study lends support to the incorporation of FoMO as a variable in this current study, particularly in determining how deficits in needs might be associated with distorted thinking and perfectionistic standards.

Franchina et al, (2018) investigated the effect of FoMO on social media addiction and "phubbing" (snubbing people to attend to one's phone). The participants were adolescents, although the sample number was not specified. The researchers used a short, four-item version of the original FoMO scale. The results showed that higher FoMO was strongly linked with more frequent phubbing behavior and more time spent on social networking. The study concluded that FoMO is a main predictor of disturbed real-life social contact. These findings are relevant to this study because they point out how FoMO can spur social comparison and justify perfectionistic activities based on distorted assumptions about self-worth.

Btachnio & Prezepiorka (2017) examines the relations between fear of missing out, narcissism, Facebook intrusion, and life satisfaction. They hypothesized that the fear of missing out and narcissism would play a significant role in Facebook intrusion. The participants in the study were 360 Polish users of Facebook. We administered the Facebook Intrusion Scale, the Fear of Missing Out Scale, the Narcissistic Personality Inventory, and the Satisfaction with Life Scale. The results showed that a high level of fear of missing out and high narcissism are predictors of Facebook intrusion, while a low level of fear of missing out and high narcissism are related to satisfaction with life. Our findings provide a more comprehensive picture of the predictors of Facebook intrusion and reveal interesting patterns.

Elhai et al, (2016) sought to investigate the association between FoMO, depression, anxiety, and problematic smartphone use. The research included a non-clinical sample of 296 participants. In measuring FoMO and emotional symptoms, the authors relied on standardized questionnaires, such as a FoMO scale, depression and anxiety measures, and smartphone use questionnaires. They discovered that "FoMO was most robustly associated with both problematic smartphone use and social smartphone use compared to negative affect." The research concluded that FoMO is likely a main cause of problematic smartphone behaviors, possibly to a greater extent than depression or anxiety on their own. These results are important to the current study as they indicate the emotional and behavioral repercussions of FoMO and affirm its connection with cognitive and perfectionistic proclivities.

Chotpitayasunondh and Douglas (2016) explored FoMO and internet addiction as predictors of smartphone addiction. The survey was conducted with adults in the age range of 18 to 66 years. FoMO and smartphone addiction questionnaires were filled



out by the participants. The findings identified that "internet addiction and FoMO were positive predictors of smartphone addiction." The authors concluded that FoMO is a strong predictor of compulsive technology use, particularly when accompanied by existing addictive behaviors. This study affirms that FoMO is associated with maladaptive cognitive and behavioral styles, which correspond with this current study's interest in perfectionism and distortion of thoughts.

### ***2.2.2 Studies on Perfectionism***

Larionow (2024) investigated Multidimensional models of perfectionism postulating the existence of various perfectionism traits, with different effects on mental health. This study aimed to explore *whether*, *how*, and *which* individual perfectionism traits are uniquely associated with stress and well-being. The participants were 253 students aged 18–30 who completed the Frost Multidimensional Perfectionism Scale, the Perceived Stress Scale, and the Warwick–Edinburgh Mental Well-being Scale. Controlling for the common variance of perfectionism traits in statistical analysis, it was shown that (1) Personal Standards were associated with higher well-being and lower stress, (2) Concern over Mistakes and Doubts about Actions were related to lower well-being and higher stress, (3) Parental Expectations and Parental Criticism were not correlated with stress, and (4) Parental Criticism was associated with lower well-being. In the multi-predictor mediation model, with five perfectionism traits as predictors, perceived stress was a significant mediator between several perfectionism traits (i.e., Personal Standards, Concern over Mistakes, and Doubts about Actions) and well-being. Overall, Personal Standards, Concern over Mistakes, and Doubts about Actions seem to be parsimonious psychological targets, with Personal Standards expressing mental health-promoting effects, whereas Parental Expectations and Parental Criticism seem to be less important psychological targets.

Wu et al, (2024) attempted to clarify the underlying mechanism of first-year undergraduate students' maladaptive perfectionism in relation to their anxiety, this study constructs a mediating model with moderation, focusing on the investigation of the mediating role of self-compassion and the moderating role of family support. A total of 924 university students were involved in the investigation, responding to questionnaires on their maladaptive perfectionism, anxiety, self-compassion, and family support. The results showed that (1) after controlling for gender and Hukou, maladaptive perfectionism had a significant positive predictive effect on anxiety; (2) self-compassion can play a role in mediating the relationship between maladaptive perfectionism and anxiety; and (3) the mediating effect of self-compassion on anxiety in terms of maladaptive perfectionism was moderated by family support. The results of this study have important theoretical value and practical significance for improving first-year undergraduate students' anxiety.

Kareem and Al-Munif (2024) sought to identify perfectionism profiles and evaluate the best-fitting short form of Hewitt and Flett's Multidimensional Perfectionism Scale (HF-MPS) within a Korean context. Methods: Data were collected from 276 Korean college students to compare three short forms of the HF-MPS: Cox et al.'s, Hewitt et al.'s, and a newly proposed version. Reliability and validity were assessed for each short form, and latent profile analysis with distal outcomes was conducted using the best-fitting short form to identify perfectionism profiles. Results: All three short forms demonstrated good reliability and validity. However, the newly proposed short form showed the highest alignment with the original scale and the best model fit. Using this short form, three perfectionism profiles were identified: high perfectionists (HiP), average perfectionists (AvP), and non-perfectionists (NP). Non-perfectionists displayed the most adaptive emotional adjustment, while high and average

perfectionists exhibited similar levels of emotional adjustment. Conclusion: This study identified three distinct perfectionism profiles within a Korean sample using the best-fitting short form of the HF-MPS. Findings suggest that perfectionism factors may be more closely interrelated in this cultural context, with self-oriented or other-oriented perfectionism potentially buffering against emotional maladjustment. These results underscore the importance of culturally tailored approaches to understanding and assessing perfectionism.

Melero et al, (2023) conducted a study aimed to investigate the relationships among perfectionism, mental health factors, and emotional regulation in adolescents and to evaluate the efficacy of psychoeducational interventions. Two studies were conducted: (1) A cross-sectional study ( $n = 261$ ) examined the correlations among perfectionism, mental health factors, and emotional regulation. (2) An experimental study ( $n = 115$ ) evaluated the effects of psychoeducation on perfectionism and healthy habits compared with a control group. The measures included questionnaires on perfectionism, depression, anxiety, stress, and emotional regulation. Study 1 found that maladaptive perfectionism was positively correlated with depression, anxiety, stress, and difficulties in emotional regulation. Adaptive perfectionism was negatively correlated with deficits in emotional understanding. Study 2 showed that psychoeducational interventions reduced maladaptive perfectionism and depression levels but increased stress in the experimental groups. No significant changes were observed in adaptive perfectionism or the anxiety level. Conclusions: These findings highlight the complex relationships among perfectionism, mental health, and emotional regulation in adolescents. Targeted interventions can reduce maladaptive perfectionism and its associated negative effects. Further research is needed on the long-term outcomes and refinement of interventional strategies.

Mitchell, Nobel & Essau (2023) was undertaken to study whether problem severity, maladaptive perfectionism, and perceived parental pressure moderate the effectiveness of a school-based performance anxiety program, and if this depends on the level of program attendance. The final sample consisted of  $N = 196$  adolescents ( $M_{age} = 14.12$ ,  $SD = 0.79$ , with 53% females) who participated in a randomized controlled trial. ANCOVAs were conducted for two indicators of performance anxiety: test anxiety and fear of failure. The results demonstrated that for test anxiety, the program was only effective for adolescents with higher pretest levels. Moreover, in the subsample of adolescents with higher program attendance, the program was only effective for adolescents with higher self-criticism perfectionism, and larger effects were observed for adolescents with higher pretest test anxiety and socially prescribed perfectionism. Our findings demonstrate that even a short program can yield positive effects, particularly for adolescents with high program attendance and who experience high problem severity and maladaptive perfectionism.

Buhlmann et al, (2022) intended to investigate the association between domains of perfectionism to both positive (self-esteem, wellbeing) and negative mental health indices (narcissism and psychological distress) while testing the structural validity of the *Short Multidimensional Perfectionism Scale* in a large non-English speaking community-based sample in Hungary. A total of 4,340 participants (49.3% male) took part in an online survey that included *Rosenberg's Self-Esteem Scale*, *Narcissistic Admiration and Rivalry Questionnaire*, *World Health Organization Wellbeing Index-5*, and parts of *Brief Symptoms Inventory-18*. Using structural equation modelling analyses, we confirmed the three-dimensional model of perfectionism in our community sample. In the multivariate analyses, all perfectionism factors were related to narcissism. Furthermore, only socially prescribed perfectionism was associated

with low self-esteem and lower wellbeing; however, both socially prescribed and self-oriented perfectionism were associated with higher psychological distress. Our findings supported the notion that different domains of perfectionism correlate to mental health indices differently, indicating that socially prescribed perfectionism may be the harmful component of perfectionism.

Stricker et al, (2019) attempted to meta-analytically integrate 672 effect sizes from 72 samples ( $N = 21\,573$ ) describing relations between multidimensional perfectionism and the Big Five personality traits. Perfectionistic concerns correlated positively with Neuroticism and negatively with Extraversion, Agreeableness, Conscientiousness, and Openness. Perfectionistic strivings correlated positively with Conscientiousness, Openness, Neuroticism, and Extraversion and were unrelated to Agreeableness. The measures of perfectionistic concerns and perfectionistic strivings moderated most of these relations. Meta-analytic structural equation modelling allowed controlling each perfectionism dimension for the respective other. This partialling increased all correlations with the exception of the previously positive correlation between perfectionistic strivings and Neuroticism, which ceased to be significant. The findings support the distinction between perfectionistic strivings and perfectionistic concerns and demonstrate how multidimensional perfectionism is situated in the context of broader personality traits.

Smith et al, (2016) introduces a new measure of dispositional perfectionism: the Big Three Perfectionism Scale (BTPS), rigid perfectionism, self-critical perfectionism, narcissistic perfectionism via 10 lower-order perfectionism facets. The investigation examined the structure of the BTPS using exploratory factor analysis in Study 1 (288 undergraduates) and confirmatory factor analyses in Study 2 (352 community adults) and Study 3 (290 undergraduates). Additionally, in Study 3 the relationships among

the BTPS, other measures of perfectionism, and the five-factor model of personality were investigated. Overall, findings provide first evidence for the reliability and validity of the BTPS as a multidimensional measure of perfectionism.

O'Connor (2007) looked into whether there has been a 300 percent increase in the number of published papers on perfectionism. Given the inconsistent findings in the literature, this systematic review examines, for the first time, the nature of the relationship between perfectionism and suicidality. To this end, the three main psychological and medical databases were searched. Twenty nine papers of perfectionism and suicidality were found. There is considerable evidence that selfcritical evaluative concerns perfectionism (i.e., socially prescribed perfectionism, self-criticism, concern about mistakes, and doubts about action) is correlated with suicidality. The methodological implications for future research are examined. In addition, the clinical implications for treatment and how these findings relate to the current conceptual debate on the nature of perfectionism are discussed.

Flamenbaum & Holden (2007) examined whether psychache mediates the relationship between perfectionism and suicidality. Furthermore, the link between perfectionism and psychache was examined for mediation by unfulfilled psychological needs. Participants were 264 undergraduate students. Structural equation modeling with bootstrapped estimates determined that psychache fully mediated the relationship between socially prescribed perfectionism and suicidality. Additionally, the relationship between socially prescribed perfectionism and psychache was partially mediated by unfulfilled psychological needs.

Terry-Short et al, (1995) investigated the possibility of distinguishing aspects of perfectionism on the basis of perceived consequences, mirroring a behavioural distinction between positive and negative reinforcement. A 40-item questionnaire,

designed to measure perfectionism defined in terms of both positive and negative outcome, was administered to 281 women; a comparison group ( $N = 225$ ), an eating disordered group ( $N = 21$ ), a depressed group ( $N = 15$ ) and successful athletes ( $N = 20$ ). Limiting the number of factors to two yielded a clear distinction between positive and negative perfectionism. Group comparisons yielded significant differences; for athletes high positive perfectionism was associated with a low negative perfectionism score; for the eating disorders group a high positive perfectionism score was associated with a high negative score. When analysed in terms of personal and social items the distinguishing factors were the negative and positive components, athletes and eating disordered groups obtaining comparably high positive personal perfectionism scores and the clinical groups obtaining comparably high negative perfectionism scores.

Frost & Henderson (1991) was undertaken to study the relationship of perfectionism (from a recently devised multidimensional measure) with female athletes' reactions to athletic competition and coaches' ratings of reactions to mistakes during competition. Athletes who rated high in Concern Over Mistakes (one dimension of perfectionism) reported more anxiety and less self-confidence in sports, displayed a general failure orientation toward sports, reacted negatively to mistakes (by their report and by coaches' ratings), and reported more negative thinking in the 24 hours prior to competition. A second dimension of perfectionism, High Personal Standards, was associated with a success orientation toward sports and more dreams of perfection prior to competition. The possible influence of perfectionism on motivation and performance in sports is discussed.

### ***2.2.3 Studies on Cognitive Distortions***

Nagata et al, (2024) conducted a longitudinal study that examined the prospective relationships between screen time and child behavioral problems in a large, diverse nationwide sample of adolescents in the United States, which was the objective of the current study. They analyzed cohort data of 9,538 adolescents (9–10 years at baseline in 2016–2018) with two years of follow-up from the Adolescent Brain Cognitive Development (ABCD) Study. They used mixed-effects models to analyze associations between baseline self-reported screen time and parent-reported mental health symptoms using the Child Behavior Checklist, with random effects adjusted for age, sex, race/ethnicity, household income, parent education, and study site. The sample was 48.8% female and racially/ethnically diverse (47.6% racial/ethnic minority). Higher total screen time was associated with all mental health symptoms in adjusted models, and the association was strongest for depressive, conduct, somatic, and attention-deficit/hyperactivity symptoms. The specific screen types with the greatest associations with depressive symptoms included video chat, texting, videos, and video games. The association between screen time and depressive, attention-deficit/hyperactivity, and oppositional defiant symptoms was stronger among White compared to Black adolescents. The association between screen time and depressive symptoms was stronger among White compared to Asian adolescents. Screen time is prospectively associated with a range of mental health symptoms, especially depressive symptoms, though effect sizes are small. Video chat, texting, videos, and video games were the screen types with the greatest associations with depressive symptoms. Future research should examine potential mechanisms linking screen use with child behavior problems.



Avcı & Ünal (2024) conducted a cross-sectional and descriptive study to determine the social media and Internet addiction levels of adolescents. The Social Media Addiction Scale for Adolescents, and The Internet Addiction Scale for Adolescents were used to collect data. An independent sample *t*-test was used to compare the mean differences between the two groups. A one-way ANOVA test was used to compare mean differences between multiple groups, and Pearson's correlation analysis was used to examine the relationships between quantitative variables and scale scores. No significant relationship was found between adolescents' gender and age and addiction levels ( $p > 0.05$ ). On the other hand, addiction levels differed significantly by school type and district ( $p < 0.05$ ). Students in selective schools and secondary schools had lower addiction levels, and those in open-admission high schools had higher addiction levels ( $p < 0.05$ ). The highest level of addiction was found in Çankaya district and the lowest in Altındağ district. Daily online time and social media time increased addiction ( $p < 0.05$ ). Safe Internet use and receiving support from nurses affected addiction levels ( $p < 0.05$ ). The results show that adolescents aged 12–18 years are at significant risk of social media and Internet addiction. Therefore, it is recommended that nurses support these young people, assess their risks, and identify specific tasks.

Sireli, Dayi, & Colak (2023) investigated the relationship between problematic social media use and self-esteem in university students and to test the mediating role of cognitive distortions in the relationship between these two variables. The sample of the study consisted of 239 young individuals, studying at a private university. Participants were evaluated by administering the "Rosenberg Self-Esteem Scale (RSES)", "Social Media Disorder Scale (SMD-9)", and "Cognitive Distortions Scale (CDS)". Results revealed that there was a negative significant relationship between the problematic social media use levels of the participants and their self-esteem. In the

model established to evaluate the mediating role of cognitive distortions in the relationship between problematic social media use and self-esteem levels, it was determined that cognitive distortions played a partial mediating role in the sub-dimensions of "self-perception", "self-blame", "hopelessness" and "seeing life as dangerous", while the sub-dimensions of "helplessness" and "total scale scores" played a full mediator role. Their findings show that there is a negative relationship between the problematic social media use of young people and their self-esteem levels, and cognitive distortions play a mediating role in the relationship between both variables.

Ouhmad et al, (2023) evaluated the association between the production of cognitive distortions and PTSD by measuring levels of anxiety and depression. Our sample comprised 183 participants divided into three groups: 59 trauma-exposed with PTSD, 61 trauma-exposed without PTSD, and 63 non-trauma-exposed non-PTSD (controls). All participants were assessed on the following dimensions: PTSD (PCL-5), cognitive distortions (EDC-A), anxiety and depression (HADS). The main results highlight a production of cognitive distortions in people with PTSD, who had significantly more positive than negative cognitive distortions compared to the group exposed to trauma without PTSD. In addition, the PTSD group had higher anxiety and depression scores than the other two groups. Findings indicate that people with PTSD show more positive cognitive distortions than those without PTSD, and that this is not related to levels of anxiety and depression.

Carneiro et al, (2023) was undertaken to study whether distorted thoughts mediate depressive symptoms in MDD over a 6-month period. These are secondary results from a study that followed 119 patients diagnosed with moderate to severe MDD for 6 months. Diagnoses were confirmed by the Structured Interview for DSM-IV (SCID-

CV). The analysis was composed of results from the Hamilton Depression Rating Scale (HAM-D-17), the Montgomery-Asberg Depression Rating Scale (MADRS), the second edition of the Beck Depression Inventory (BDI-II), and the Depression Thoughts Scale (DTS) collected at weeks 1, 8, 12 and 24. Results showed that the DTS mediated the relationship between depressive symptoms experienced approximately 3 months after starting antidepressant treatment. Cognitive distortions were linked as a mediator to depressive symptoms, highlighting the importance of early psychological interventions in patients with MDD who exhibit these distortions.

Agnihotri & Datti (2023) examines the relationship between problematic Internet use (PIU) and cognitive distortions among University students. Data was collected from 387 students from Andhra Pradesh, India. Generalized Problematic Internet Use Scale-2 (GPIUS – 2) and Cognitive Distortions Questionnaire were employed to gather responses. Family size, education level, and average time of internet use during COVID-19 were discovered to be key elements for GPIUS-2 and GPIUS-2 components (negative outcomes, cognitive preoccupation, and mood regulation). Pearson correlation showed a strong positive relationship between problematic internet use (PIU) and cognitive distortions. A simple linear regression analysis was performed in which the PIU scores were predicted based on cognitive distortions, and it was found that cognitive distortions predicted PIU. The study's findings will encourage preventive strategies, testing, and early diagnosis and treatment for people vulnerable to PIU. This research will help facilitate cognitive-behavioral therapy (CBT) for PIU.

Duman (2018) examines the cognitive distortion levels of working adults in terms of some socio-demographic variables. For this purpose, 18 females and 14 males were included in the study. The participants are given The Cognitive Distortion Scale-R

(CDS-R), a revised version of the Non-Rational Thinking Scale developed by Türkmen and a Personal Information Form of socio-demographic information. As a result, the cognitive distortions in working individuals have a "high" level of cognitive distortion. When the relationship between cognitive distortion levels and sociodemographic variables is evaluated, it was understood that there was a significant difference in relation only between the level of education and cognitive distortion. In this connection, it is revealed that the highest level of cognitive distortion scores exist in "low educated" (elementary degree) people and the lowest cognitive distortion scores were obtained in "high educated" (associate and bachelor degree) individuals.

Hoseini, Dusti & Bagheri (2016) focused on identifying the relationship between eating disorders with perfectionism and cognitive distortions in female students. The study population included 6289 female students in Sari Islamic Azad University. They performed a descriptive correlational study in 500 female students who were selected by random cluster sampling. The research instrument included the Eating Habits Questionnaire (EHQ; Coker and Roger 1990), Positive and Negative Perfectionism Scale (PANPS; Terry-Short et al., 1995) and Albert Ellis's Cognitive distortions questionnaire. Data analysis was done applying descriptive statistics methods, Pearson's correlation and multivariate regression test in SPSS ver.17. The results showed no significant relationship between concerns about weight and anorexia nervosa with perfectionism. There was a positive relationship between bulimia nervosa and perfectionism. There was a positive relationship between worries about weight, anorexia nervosa and anorexia nervosa with cognitive distortions. There was a positive relationship between negative perfectionism and eating disorders, and a negative relationship between positive perfectionism and eating disorders.

Perfectionism and cognitive distortions were able to predict eating disorders. Eating disorders are directly associated with an individual's thoughts and cognition, therefore, cognitive therapy could be of great use in treating these patients.

BARRIGA et al, (2000) investigated the prevalence of self-serving and self-debasing cognitive distortions and their specific relations to externalizing and internalizing problem behaviors in 96 incarcerated male and female delinquents and a comparison sample of 66 high school students. The incarcerated participants evidenced higher levels of cognitive distortion (self-serving and self-debasing) and problem behavior (externalizing and internalizing) than did comparison participants. Both self-serving and self-debasing cognitive distortions were associated with unique variance in overall problem behaviors. Most notably, self-serving cognitive distortions specifically related to externalizing behaviors, whereas self-debasing cognitive distortions specifically related to internalizing behaviors. The theoretical and treatment implications of the findings are discussed.

Abel et al, (1989) investigated with two hundred and forty child molester paraphiliacs, 48 non-child molesting paraphiliacs and 86 non-paraphiliacs were administered a 29 item Likert scale of statements designed to determine: 1) if cognitive distortions concerning child molestation exist among child molesters and (2) if child molesters can be discriminated from non-child molesters by assessing their cognitive distortions. Factor analysis yielded six factors covering the general area of child molestation being harmful to the child. The factors were reliable and successfully separated child molesters from non-child molesters. Results confirmed that child molesters not only vary from non-child molesters by their behavior with children, but also by their cognitions or beliefs about the consequence of their child molestation behavior on the child.

Lefebvre (1981) Measured the tendency to make cognitive errors in 18 depressed psychiatric patients, 19 depressed low back pain (LBP) patients, 29 nondepressed LBP patients, and 23 nondepressed persons without LBP. SS were administered 2 cognitive error questionnaires that focused on either general or LBP-related life experiences. These were designed to measure general cognitive distortion as well as 4 empirically derived dysphoric cognitive errors (catastrophizing, overgeneralization, personalization, and selective abstraction). Results indicate that all cognitive errors were endorsed significantly more strongly by depressed SS with or without LBP. Although depressed LBP Ss made cognitive errors in interpreting many general experiences, they endorsed 3 out of 4 errors focused on LBP experiences significantly more strongly than depressed nonpain Ss. Findings suggest that depression in LBP patients is a function of both LBP and cognitive errors. Thus, cognitive therapy designed to correct cognitive errors may alleviate depression in LBP patients despite the persistence of pain.

#### ***2.2.4 Combined Studies on Fear of Missing Out and Perfectionism***

Sari & Radu (2025) aimed to investigate the mediating role of fear of missing out (FoMO) in the relationship between social media exposure and perfectionism among Romanian university students. A descriptive correlational design was used, and the sample consisted of 380 university students in Romania. Participants completed three standardized instruments: the Social Media Use Integration Scale (SMUIS), the Fear of Missing Out Scale (FoMOs), and the Frost Multidimensional Perfectionism Scale (FMPS). Data were analyzed using SPSS-27 for descriptive and Pearson correlation analyses and AMOS-21 for Structural Equation Modeling (SEM) to assess direct and indirect relationships among variables. The results indicated significant positive

correlations between social media exposure and FoMO, FoMO and perfectionism, and social media exposure and perfectionism. SEM revealed that FoMO significantly mediated the relationship between social media exposure and perfectionism, with a total effect of  $\beta = 0.47$ . These findings suggest that fear of missing out plays a significant mediating role in linking social media exposure to increased perfectionistic tendencies in young adults. Interventions targeting FoMO may be effective in reducing perfectionism exacerbated by social media engagement.

Piko, Müller, Kiss, & Mellor (2025) sought to explore the potential role of psychological variables that refer to self-evaluation in relation to others, such as social media addiction, social comparison, perfectionism, and loneliness. Hungarian university students ( $N = 255$ ; 70.6 % females, aged between 18 and 35 years). Based on correlation, multiple regression and path analysis, they found that social comparison was the strongest predictor of FoMO. While social media addiction, loneliness, and perfectionism also contributed directly to FoMO, these variables also served as mediators in the link between social comparison and FoMO. These findings draw attention to the need for social skills training in which students can learn to successfully handle various social situations. Developing educational materials for students to inform them about the nature of FoMO and how to manage it would also be useful to improve the users' digital resilience.

Wan, & Zhou (2025) explores the relationships between university students' State-FoMO, loneliness, and social media use, as well as the moderating role of adaptive perfectionism. Questionnaire data were collected from 1075 university students. Hierarchical regression analyses (via SPSS) were conducted to test direct effects, and the bootstrap method (via PROCESS) was used to examine the mediating role of social media use and the moderating role of adaptive perfectionism. An intervention

experiment was conducted with a control group design, comprising 40 participants in each of the two experimental groups and 40 in the control group. (1) Loneliness can lead to social media use. (2) Social media use has a significant positive effect on State-FoMO. (3) Social media use partially mediated the relationship between loneliness and State-FoMO. (4) Adaptive perfectionism negatively moderated the relationship between loneliness and social media use. (5) Adaptive perfectionism plays a negative moderating role in the path of “loneliness, social media use, and State-FoMO.” (6) Group psychological intervention can effectively reduce students’ loneliness, thereby alleviating their social media use and State-FoMO. Lonely university students often turn to social media for emotional support, which can lead to State-FoMO. However, adaptive perfectionism can lessen the effect of loneliness on social media use and State-FoMO. ICBT-based group counseling can reduce loneliness and, consequently, social media use and State-FoMO among university students.

Demir & Merve (2025) looked into how young adults experience and interpret FoMO, and how it influences their anxiety and self-imposed perfectionism in the context of digital and real-life environments. Using a qualitative approach, semi-structured interviews were conducted with 18 university students, and the data were analyzed using thematic analysis. The findings reveal that FoMO is a frequent and emotionally charged experience, often triggered by social media and offline peer interactions. Participants reported a range of cognitive and emotional responses, including social pressure, overthinking, and physical symptoms of stress. FoMO was also found to contribute to perfectionistic behaviors, such as self-comparison, setting unrealistically high standards, and curating idealized online identities. Despite these challenges,



participants actively employed coping strategies, such as social media breaks, peer support, cognitive reframing, and prioritizing offline activities.

Zaremohzzabieh et al, (2024) investigates the influence of various factors, including the fear of missing out, emotional attachment, information overload, and decision fatigue, on digital hoarding behaviors among university students in Iran. Additionally, the study examines the moderating role of maladaptive perfectionism in these relationships. The study involved 275 university students selected from four universities in Iran. The data were analyzed using partial least squares structural equation modeling (PLS-SEM). The results revealed that the fear of missing out, emotional attachment, information overload, and decision fatigue significantly predict university students' digital hoarding behavior. Moreover, the findings highlighted the moderating effect of maladaptive perfectionism on the association between emotional attachment and digital hoarding behavior. These findings have practical implications for educational institutions and mental health professionals, as they can help in developing targeted strategies and interventions to manage digital hoarding behavior in university freshmen and promote healthier digital habits.

### ***2.2.5 Combined Studies on Fear of Missing Out and Cognitive Distortions***

Hartanto et al, (2022) aimed to examine the moderating role of cognitive reappraisal in attenuating diminished emotional well-being associated with FoMO. This has resulted in a greater desire to constantly be socially connected with the activities of others, or the fear of missing out (FoMO). Utilizing data from a 7-day diary study of a large sample of young adults ( $N = 261$ ). Multilevel modeling showed that cognitive reappraisal attenuated the day-to-day within-person associations between daily FoMO and indicators of daily emotional well-being such as negative affectivity, anxiety, and depressive symptoms.

Li & Ye (2022) explored the relationship between Fear of Missing Out (FoMO) and irrational procrastination in a mobile social media environment and its underlying mechanism: the mediating role of cognitive failure. The study was conducted with 817 college students using the FoMO Scale, Irrational Procrastination Scale, Cognitive Failures Questionnaire, and Self-Control Scale. The results showed that (a) FoMO positively predicted irrational procrastination in the mobile social media environment; (b) cognitive failure had a complete mediating effect on the relationship between FoMO and irrational procrastination; and (c) self-control had a moderating effect on the relationship between FoMO and cognitive failure.

#### ***2.2.6 Combined Studies on Perfectionism and Cognitive Distortions***

Chen et al, (2023) aimed to investigate whether perfectionists show different preferences in their consumption choices compared with non-perfectionists and to explore the potential psychological mechanisms mediating this effect. Through four studies, they found that perfectionists are less likely to buy imperfect products, including those that are close to expiry and that have defective functioning, flawed appearance, and incomplete after-sales service than non-perfectionists, and are more likely to avoid choosing imperfect products. In addition, we found a mediating effect of dichotomous thinking and intolerance of uncertainty on this effect to explain the behavioral preferences of perfectionists in their purchasing choices. Manufacturers and marketers can benefit from the results of this study by implementing targeted production requirements and marketing strategies based on the consumer behavior preferences of perfectionists.

Aral, Sarisoy & Aral (2023) was undertaken to study to compare bipolar depression (BD) and unipolar depression (UD) patients and healthy controls in terms of their

cognitive distortions and perfectionist traits during acute depressive episodes. The study consisted of 80 patients with unipolar depression, 80 patients with bipolar depression, and 80 healthy controls. Sociodemographic and Clinical Data Form, Cognitive Distortion Scale (CDS), Frost's Multidimensional Perfectionism Scale (FMPS), Hamilton Anxiety Rating Scale (HARS), Hamilton Depression Rating Scale (HDRS), and Young Mania Rating Scale (YMRS) were used as measurement tools. It was found that patients with unipolar and bipolar depression had statistically equal but higher total CDS interpersonal and personal achievement scores than healthy controls, and all subtypes of the CDS labeling score were higher in the unipolar depression group than in the other groups. It was found that both depression groups had higher FMPS self-oriented and social-oriented perfectionism scores than healthy controls, lower others-oriented perfectionism scores than healthy controls, and there were no statistically significant differences between them in terms of perfectionism subtypes. In the light of the research data, it was found that the patients with bipolar/unipolar depression had more cognitive distortion than healthy controls and cognitive distortion was not significantly different in the two groups. The data obtained have the potential to provide a theoretical basis for a psychotherapeutic approach.

Stevenson & Akram (2022) tried to assess the concurrent and longitudinal relationships between multidimensional perfectionism, perceived stress, and self-critical thinking in a sample of UK university students. Specifically, to determine whether self-critical thinking at baseline mediated the longitudinal relationship between baseline perfectionism and future stress at follow-up. Socially prescribed, and self-oriented perfectionism were related to increased stress, self-hatred, and self-inadequacy at baseline. Longitudinal analysis revealed that baseline self-oriented and

socially prescribed perfectionism were significantly related to increased reports of stress and self-critical thinking fifteen weeks later at follow-up. Perfectionistic and self-critical thinking appears to accentuate the experience of perceived stress in the university student population.

Hoseini, Dusti, & Bagheri (2016) intended to investigate the relationship between eating disorders with perfectionism and cognitive distortions in female students. The study population included 6289 female students in Sari Islamic Azad University. They performed a descriptive correlational study in 500 female students who were selected by random cluster sampling. The research instrument included the Eating Habits Questionnaire, Positive and Negative Perfectionism Scale and Albert Ellis's Cognitive distortions questionnaire. The results showed no significant relationship between concerns about weight and anorexia nervosa with perfectionism. There was a positive relationship between bulimia nervosa and perfectionism. There was a positive relationship between worries about weight, anorexia nervosa and anorexia nervosa with cognitive distortions. There was a positive relationship between negative perfectionism and eating disorders, and a negative relationship between positive perfectionism and eating disorders. Perfectionism and cognitive distortions were able to predict eating disorders.

Downey et al, (2014) examined the mediating role of perfectionistic thinking in the personality perfectionism-ED relationship among both male and female college students, and included measures assessing both typically-male and typically-female ED symptoms. A majority-White sample of 140 males and 329 females completed online versions of the Multidimensional Perfectionism Scale, Perfectionism Cognitions Inventory, Drive for Muscularity Scale, items from the Eating Disorder

Examination Questionnaire, and other measures. Regression tests examined the hypothesized role of perfectionistic cognitions as a mediator, including participant age, BMI, and positive and negative affect as covariates. Among women, relationships between both self-oriented and socially prescribed perfectionism, and dieting behavior were fully mediated by increased perfectionistic thinking. Among men, however, the relationship between only self-oriented perfectionism and bulimic (but not dieting) behavior, was fully mediated by increased perfectionistic thinking.

Umeh (2013) assessed shyness in adolescents and managed it using group cognitive behavioral therapy (CBT) among those with high levels of it. The participants were 240 secondary school students selected using stratified random sampling from a private secondary school in Lagos. Shyness Scale 34 (SS-34) was administered to them and 36 of them whose scores indicate high levels of shyness were identified. While the treatment group was subjected to 10 sessions of group CBT, nothing was done to the control group. Employing a pretest-post-test design, Analysis of covariance (ANCOVA) was used to analyze the data. The result shows that after adjusting for pretest scores, there was a significant effect of the between subjects factor groups,  $F(1, 33) = 47.70$ ,  $p < .00$ , partial  $\eta^2 = .59$ . Adjusted mean recognition scores suggest that group cognitive behavioural therapy lowered the level of shyness significantly thereby making it a useful technique in the management of shyness. The result was discussed in the light of the need to assess and manage shyness in adolescents toward empowering them to realize their potential.

### **2.3 Research Gap**

While individuals studies have investigated Fear of Missing Out (FoMO), perfectionism, and cognitive distortions individually, few studies have investigated

the interconnection of these three variables, especially in the case of subjects being young adults. FoMO has been found across different studies to be related negatively to psychological well-being like anxiety, poorer well-being, and impulsivity. Perfectionism has also been found to be related to several cognitive distortions and maladaptive ways of thinking. Yet few studies have investigated how these three variables co-function within one framework, especially that of emerging adulthood—a stage marked by identity exploration, instability, and increased social media usage.

Whereas both FoMO and perfectionism have individually been associated with cognitive distortions, few investigations have sought to explore the potential mediating or moderating effects between the variables. Additionally, there has been a preponderance of Western-based studies, with limited research conducted within the Indian population, wherein perfectionistic behavior and cognition may be differentially influenced by social and cultural expectations.

The present study sought to bridge this gap in literature by examining the intercorrelations between FoMO, perfectionism, and cognitive distortions, examining the gender differences in all the variables and performing exploratory analyses to determine whether perfectionism mediates the effect of FoMO on cognitive distortions in young adults.

In so doing, the study tries to present a more integrative model of the psychological processes of young adults and adds to the burgeoning literature on cognitive outcomes of digital involvement and perfectionism.

## **Chapter 3**

### **Method**

Research is the scientific and systematic search for pertinent information or facts on a specific topic. Research methodology is a way to systematically solve the research problem. It is necessary for the researcher to know what and how to develop certain indices or test how to calculate the Mean, Mode, Median, Standard Deviation, Chi-Square and how to apply particular techniques. But the researcher needs to know which of these methods and techniques are relevant and which are not. Here the researcher presents how the research work was carried out. The method used to investigate the relationship between Fear of Missing Out, Perfectionism and Cognitive Distortions among Young Adults is explained systematically in this chapter.

### **3.1 Research Design**

Research design is a set of instructions provided to the investigator which enables him to gather and analyse the data in certain ways; it is therefore a control mechanism. The function of a research design is to ensure that the evidence obtained enables the researcher to effectively address the research problem logically and as unambiguously as possible. The statistical principle that this mechanism is designed to maximize the systematic variation, to control extraneous variance systematically, and to minimize error variance. The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. It is important to understand that research problems determine the type of design one should use, not the other way around! (De vaus, 2001).

The current research utilized a quantitative, correlational research design under the design of descriptive research. Descriptive research entails data gathering to describe



occurrences and organizing, tabulating, and interpreting it systematically to provide a clear image of a situation. It aims to address issues such as "who," "what," "when," "where," and "how," but not the "why" behind such occurrences (Neuman, 2003). A correlational design was utilized to study the relationship among Fear of Missing Out, Perfectionism, and Cognitive Distortions. Correlational research is used to identify the direction and magnitude of the relations among two or more variables without manipulating in them. It is ideally used in studies with the aim of investigating the manner in which naturally occurring variables are related to each other (Creswell & Creswell, 2018). This design was appropriate for the current study as it tried to find out whether Perfectionism relates to FoMO and whether Cognitive Distortions act as a mediator between the two. It employed standardized self-report questionnaires to gather data from a large sample, making it easier to statistically analyze and interpret.

### **3.2 Method of Sampling**

The participants were selected using an unrestricted self-selected survey, a form of convenience sampling. Unrestricted self-selected surveys are survey that are open to the public for anyone to participate in. They may simply be posted on a website so that anyone browsing through may choose to take the survey, or they may be promoted via website banners or other online advertisement, or they may be publicized in traditional print and broadcast media. Regardless of how they are promoted (or not), the key characteristics of these types of surveys are that there are no restrictions on who can participate, and it is up to the individual to choose to participate. Unrestricted self survey is a form of convenience sampling and, as such, the results cannot be generalized to a larger population.

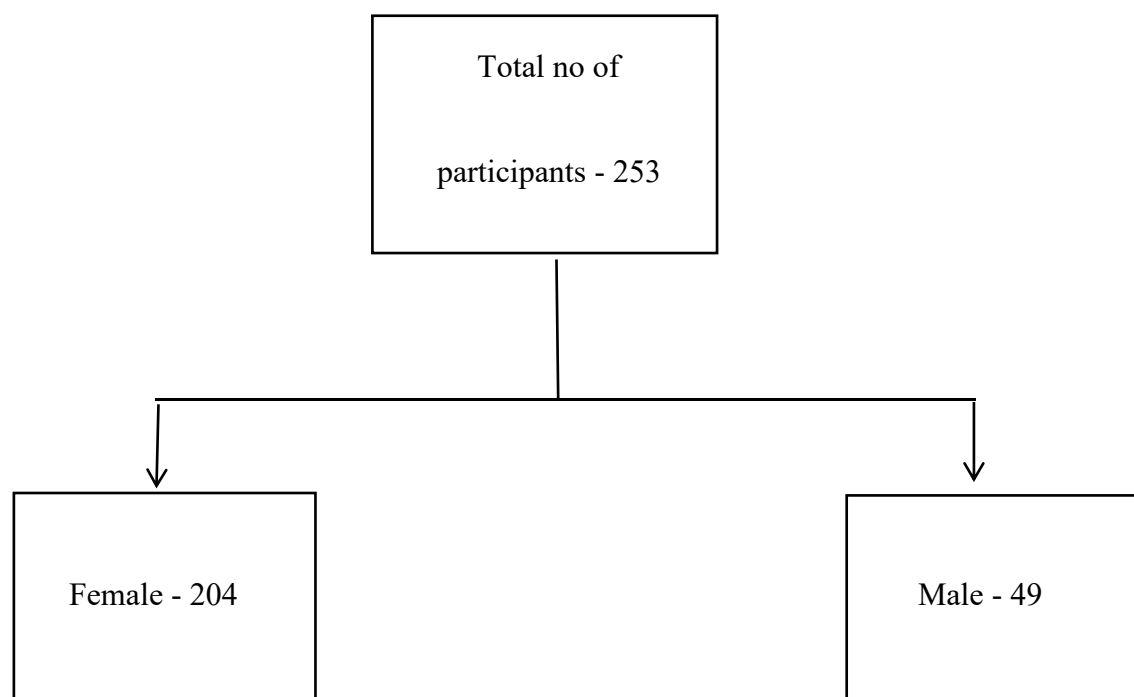
### 3.3 The Participants

A sample is a representative part of the total population. Sampling is a method used in statistical analysis in which a decided number of considerations are taken from a comprehensive population of a sample survey.

The sample consisted of 253 participants. The sample was selected using convenience sampling. They were further classified according to gender (204 females, 49 males), level of education (higher secondary, undergraduate, postgraduate and M Phil/PhD students, current status and place of residence to be further compared on their Fear of Missing Out, Perfectionism and Cognitive Distortions.

#### *Distribution of sample based on gender*

The study considered the gender of the participants like male, female and others categories to understand if gender has any influence on the topic regarded. A total of 253 individuals participated. Of the 282 participants, 204 were female, 49 were males.



### 3.4 Measures

The data was collected mainly using 3 psychological measures, a socio-demographic sheet and an informed consent sheet.

The Fear of Missing Out of the participant was assessed by using Fear of Missing Out Scale (FoMOS) by Przybylski, K. et al. (2013).

The Perfectionism of the participant was assessed by using Short Almost Perfect Scale - Revised (SAPS-R) by Rice, K. G., Richardson, C. M. E., & Tueller, S. (2014).

The Cognitive Distortions of the participant was assessed by using Cognitive Distortions Questionnaire - Short Form by de Oliveira, I. R. et al. (2015).

The socio-demographic sheet and the informed consent sheet was developed by the researcher.

#### ***Fear of Missing Out Scale (Przybylski, K. et al. , 2013)***

The fear of missing out (FoMO) scale has been defined as a pervasive apprehension that others might be having rewarding experiences from which one is absent. FoMO is characterized by the desire to stay continually connected with what others are doing (Przybylski, Murayama, DeHaan, & Gladwell, 2013). The Fear of Missing out Scale (FoMOS), developed Przybylski and colleagues in 2013 and is a 10-item unidimensional scale set on 5-point Likert type responses, and measures the degree to which one fears missing out on social events, in particular involving their friends and often, using social media to stay (hyper) connected. The scale has been shown to demonstrate high internal consistency ( $\alpha = .82$ ; Przybylski et al., 2013). Przybylski and colleagues (2013) found the measure to demonstrate convergent validity through a positive association with social media engagement ( $r = .40$ ; measure also developed by Przybylski and colleagues). Discriminant validity was demonstrated through a

negative association with La Guardia, Ryan, Couchman, and Deci's (2000) psychological need satisfaction scale ( $r = -.29$ ), insofar as those who had a higher fear of missing out felt their needs for autonomy, competence, and relatedness were diminished (authors averaged responses from all three needs; Przybylski et al., 2013). There is a collection of statements about your everyday experience. Using the scale provided please indicate how true each statement is of your general experiences. Please answer according to what really reflects your experiences rather than what you think your experiences should be. Please treat each item separately from every other item. 1 = "Not at all true of me", 2 = "Slightly true of me", 3 = "Moderately true of me", 4 = "Very true of me", and 5 = "Extremely true of me". All the items of the scale except 8 are positively worded. Total score obtainable ranges from 10 at the lower end to 50 at the higher end.

***Short Almost Perfect Scale - Revised (Rice, K. G., Richardson, C. M. E., & Tueller, S, 2014)***

The Short revised almost perfect scale (SAPS) has 8 items scored on a 7-point scale. There are two subscales: Standards: How high are the standards people set for themselves. Discrepancy: The mismatch between the standards and the degree to which these standards are reached. The Short Almost Perfect Scale–Revised (SAPS-R) was found to have high internal consistency ( $\alpha = .85-.89$ ; Rice et al., 2014). Rice and colleagues determined that the scale was found to have good convergent validity through positive correlations between the scale and other perfectionism instruments like the Almost Perfect Scale–Revised (APS-R). Discriminant validity was established by weaker or non-significant correlations of the Standards subscale with maladaptive measures such as anxiety or depression, whereas the Discrepancy subscale presented

significant positive correlations with these variables, identifying its maladaptive potential (Rice et al., 2014). The following items are designed to measure certain attitudes people have toward themselves, their performance, and toward others. It is important that your answers be true and accurate for you. For each item, please select how much you agree. 1 = “Strongly disagree”, 2 = “Disagree”, 3 = “Slightly disagree”, 4 = “Neutral”, and 5 = “Slightly agree”, 6 = “Agree”, 7 = “Strongly agree”. All the items of the scale except 2 and 8 are positively worded. Total score obtainable ranges from 8 at the lower end to 56 at the higher end.

***Cognitive Distortion Questionnaire - Short form (de Oliveira, I. R. et al., 2015)***

The Cognitive Distortions Questionnaire – Short Form (CDQuest) is an 8-item self-report measure that measures both the frequency and intensity of cognitive distortions during the previous week. It exhibits a unidimensional factor structure and substantial psychometric support across a wide range of samples. Internal consistency is between  $\alpha = .80$  and  $.91$ , and convergent validity is evidenced by moderate-to-large correlations with scales of anxiety and depression ( $r > .45$ ). Factorial validity is supported by clinical and student studies and excellent discriminant validity since scores correlate negligibly with unrelated constructs such as vocabulary knowledge or attentional control. Please think about the past week. For every statement, rate how often this kind of thinking happened (Frequency) and how intensely you believed it (Intensity) when it happened. Respondents score frequency on a 4-point Likert scale from 0 = "Did not occur", 1 = "Occasionally (1–2 days)", 2 = "Much of the time (3–5 days)" and 3 = "Almost all the time (6–7 days)" and intensity 0 = "Not at all", 1 = "A little (up to 30%)", 2 = "Much (31–70%)" and 3 = "Very much (more than 70%)",

reflecting how strongly they held to the distorted thoughts. Total score obtainable ranges from 0 at the lower end to 63 at the higher end.

### ***Socio-demographic data sheet***

The socio-demographic data sheet developed by the researcher will be used to collect the socio-demographic details of the participant such as name, age, year of birth, gender, educational qualification, current status and place of residence.

## **3.5 Procedure**

The questionnaire and scales are self-administering ones and are circulated online using social media platforms. Google form is used to prepare the questionnaire. Participants were approached online to fill out each form. Instructions were provided the beginning of the form. A scale of responses is provided against each item, and the respondent is expected to select the appropriate response without any hesitation. Prior to taking part in the study, the participants are informed about the purpose of the study, a statement assuring the confidentiality of the participant and also all participants were given an informed consent statement at the commencement of the Google Form. The data collected is then recorded, scored, and tabulated.

### ***Step 1***

Collection of socio-demographic data. The first procedure was collecting data like name, age, year of birth, gender, educational qualification, current status and place of residence.

## ***Step 2***

Assessment of fear of missing out, perfectionism and cognitive distortions. These can be measured by using Fear of Missing Out Scale, Small Almost Perfect Scale – Revised and Cognitive Distortion Questionnaire - Short form.

### **3.6 Statistical Analysis**

Analysis was done using SPSS. Descriptive Statistics, Normality Test, Spearman's Rank Correlation, Mann–Whitney U Test, Kruskal–Wallis H Test, Simple Linear Regression and Mediation Analysis, were used to analyse the data collected from the participants.

#### ***Descriptive Statistics***

Descriptive statistics refers to a set of statistical methods used to summarize and present data in a clear and understandable form. It involves organizing raw data into tables, charts, or numerical summaries, making it easier to identify patterns, trends, and anomalies. These statistics do not involve making predictions or inferences about a population but focus solely on describing the dataset at hand. Descriptive statistics can be broadly classified into three main types, each serving a specific purpose in data analysis: 1) Measures of central tendency summarize a dataset by identifying a single value that represents the “center” or typical value of the data distribution. Common measures includes; mean, median and mode. 2) Measures of dispersion describe the spread or variability of data around the central value, providing insight into the diversity or consistency of the dataset. Common measures includes; range, variance standard deviation (SD) and interquartile range (IQR). 3) These measures describe the shape and characteristics of the data distribution, including its symmetry, peaks, and

deviations. Common measures includes; skewness- positive skew and negative skew and kurtosis - high kurtosis and low kurtosis.

By employing measures of central tendency, variability, and distribution, researchers can extract meaningful insights and present data effectively. Coupled with graphical representations, descriptive statistics transforms raw data into understandable information, serving as a foundation for further statistical analysis and decision-making. Whether in education, healthcare, business, or environmental research, descriptive statistics remains indispensable for data analysis. Mastering these methods equips researchers with the skills to communicate findings clearly and make data-driven decisions confidently.

### ***Normality Test***

Normal distribution can be tested either analytically (statistical tests) or graphically. The most common analytical tests to check data for normal distribution are the: Kolmogorov-Smirnov Test, Shapiro-Wilk Test and Anderson-Darling Test. For graphical verification, either a histogram or, better, the Q-Q plot is used. Q-Q stands for quantile-quantile plot, where the actually observed distribution is compared with the theoretically expected distribution. In all of these tests, you are testing the null hypothesis that your data are normally distributed. The null hypothesis is that the frequency distribution of your data is normally distributed. To reject or not reject the null hypothesis, all these tests give you a p-value. What matters is whether this p-value is less than or greater than 0.05.

If the p-value is less than 0.05, this is interpreted as a significant deviation from the normal distribution and it can be assumed that the data are not normally distributed. If



the p-value is greater than 0.05 and you want to be statistically clean, you cannot necessarily say that the frequency distribution is normal, you just cannot reject the null hypothesis.

### ***Spearman's Rank Correlation***

Spearman's Rank Correlation is a statistical measure of the strength and direction of the monotonic relationship between two continuous variables. Therefore, these attributes are ranked or put in the order of their preference. It is denoted by the symbol "rho" ( $\rho$ ) and can take values between -1 to +1. A positive value of rho indicates that there exists a positive relationship between the two variables, while a negative value of rho indicates a negative relationship. A rho value of 0 indicates no association between the two variables.

Spearman's correlation is appropriate for more types of relationships, but it too has requirements your data must satisfy to be a valid. Specifically, Spearman's correlation requires your data to be continuous data that follow a monotonic relationship or ordinal data. When you have continuous data that do not follow a line, you must determine whether they exhibit a monotonic relationship. In a monotonic relationship, as one variable increases, the other variable tends to either increase or decrease, but not necessarily in a straight line. This aspect of Spearman's correlation allows you to fit curvilinear relationships. Spearman's rho is an excellent choice when you have ordinal data because Pearson's is not appropriate. Ordinal data have at least three categories and the categories have a natural order. For example, first, second, and third in a race are ordinal data.

***Mann–Whitney U Test***

The Mann-Whitney U-test, also known as the Wilcoxon rank-sum test is a non-parametric hypothesis test used to assess the difference between two independent samples of continuous data. It compares the distributions of two independent groups to check whether one group tends to have higher or lower values than the other. It works by ranking all observations from both groups together and then evaluating whether these ranks differ significantly.

The test is appropriate when the data are ordinal or continuous but does not follow a normal distribution, there are two independent groups (e.g., treated vs. untreated patients, two different teaching methods, etc.), the sample size is small (usually less than 30 per group), the distributions of the two groups should have a similar shape for valid median comparisons and if more than two groups need to be compared, the Kruskal-Wallis Test should be used instead.

***Kruskal–Wallis H Test***

The Kruskal Wallis test is the non parametric alternative to the One Way ANOVA. *Non parametric* means that the test doesn't assume your data comes from a particular distribution. The H test is used when the assumptions for ANOVA aren't met (like the assumption of normality). It is sometimes called the *one-way ANOVA on ranks*, as the ranks of the data values are used in the test rather than the actual data points.

The test determines whether the medians of two or more groups are different. Like most statistical tests, you calculate a test statistic and compare it to a distribution cut-

off point. The test statistic used in this test is called the H statistic. The hypotheses for the test are:  $H_0$ : population medians are equal and  $H_1$ : population medians are not equal. Consider using the Kruskal Wallis test when you have ordinal data., your data follow a nonnormal distribution, and you have a small sample size and the median is more relevant to your subject area than the mean. The Kruskal Wallis test will tell you if there is a significant difference between groups. However, it won't tell you *which* groups are different. For that, you'll need to run a Post Hoc test.

### ***Simple Linear Regression***

Simple linear regression is used to estimate the relationship between two quantitative variables. A person can use simple linear regression when they want to know: how strong the relationship is between two variables (e.g., the relationship between rainfall and soil erosion) and the value of the dependent variable at a certain value of the independent variable (e.g., the amount of soil erosion at a certain level of rainfall).

Regression models describe the relationship between variables by fitting a line to the observed data. Linear regression models use a straight line, while logistic and nonlinear regression models use a curved line. Regression allows you to estimate how a dependent variable changes as the independent variable(s) change.

It assumes that there is a linear relationship between the input and output, meaning the output changes at a constant rate as the input changes. This relationship is represented by a straight line. In linear regression, the best-fit line is the straight line that most accurately represents the relationship between the independent variable (input) and the dependent variable (output). It is the line that minimizes the difference between the actual data points and the predicted values from the model.

### ***Mediation Analysis***

Mediation Analysis models a hypothetical causal sequence in which variable X affects outcome Y indirectly through mediator variable M, and tests whether variable M indeed mediates the relationship between X and Y.

According to Baron and Kenny, we have a mediation relationship provided four conditions are met: 1) There is a significant relationship between X and M (path a). 2) There is a significant relationship between M and Y (path b). 3) Also, there is a significant relationship between X and Y (path c)

Requirement 1 means that the independent variable X is significant in the linear regression model with M as the dependent variable, and similarly for requirements 2 and 3. The fourth requirement is: In the regression model with X and M as independent variables and Y as the dependent variable, the impact of path c is greatly reduced.

Requirement 4 means that the X coefficient in this regression becomes non-significant or at least its significance is greatly reduced. This can also mean that the semi-partial correlation of Y on X factoring out M noticeably drops.

## **Chapter 4**

### **Results and Discussion**

**Table 4.1***Tests of Normality for Study Variables*

Variable	Kolmogorov-Smirnov	df	Sig.	Shapiro-wilk	df	Sig
FoMO	.059	253	.030	.977	253	.000
Perfectionism	.064	253	.013	.980	253	.001
CD	.143	253	.000	.858	253	.000

To check if the variables in the study Cognitive Distortions (CD), Perfectionism, and Fear of Missing Out (FoMO) passed the normality assumption test, both Kolmogorov-Smirnov (K-S) and Shapiro-Wilk (S-W) tests were used. They are common tests that statistically check whether a sample distribution is significantly different from a normal distribution.

The Kolmogorov-Smirnov test is better for bigger sample sizes ( $n > 50$ ), such as in this research ( $N = 253$ ), while the Shapiro-Wilk test is more sensitive but appropriate for large samples as well. Both tests provide a statistic (which indicates how much deviation from a normal curve there is) and a significance value (Sig.), which assists in establishing whether that deviation is statistically significant.

For all three variables, the K-S test yielded significant values (FoMO:  $p = .030$ ; Perfectionism:  $p = .013$ ; CD:  $p = .000$ ), which indicate that the distributions are not normal. The deviation, however, seems to be more evident in the Cognitive Distortions variable, given the larger value of its test statistic (.143).

The Shapiro-Wilk test also confirms the same findings. The S-W statistics for all three variables were less than the optimal value of 1.0, with all respective p-values

being .000, which once again suggests that none of the three variables are normally distributed. Significantly, the Shapiro-Wilk statistic for CD (.858) is significantly lower than for FoMO (.977) and Perfectionism (.980), suggesting more severe normality violation in the CD variable.

This implies that the frequency distribution of Cognitive Distortions is not only highly non-normal but perhaps skewed or kurtotic to an extent that may influence parametric statistics. Although the deviations in FoMO and Perfectionism seem to be numerically smaller, their statistical significance levels suggest that the departures from normality are statistically significant.

In conclusion, the overall findings from the K-S and S-W tests conclusively show that the three key variables are not normally distributed. These results were pivotal in determining the statistical methods employed in the study, resulting in the use of non-parametric tests that do not require normality.

**Table 4.2**

*Correlation between FoMO and Perfectionism*

Variable	1	2
FoMO	-	-.020
Perfectionism	-.020	-

The first hypothesis proposed that there will be a significant positive correlation between Fear of Missing Out (FoMO) and perfectionism. As evident from Table 4.2, the Spearman's rank correlation coefficient between perfectionism and FoMO is  $r = -0.020$ , with a p-value of 0.751. This reflects a very weak negative correlation that is

statistically not significant since the p-value is far greater than the conventional alpha level of 0.05. The null hypothesis is hence maintained. The findings indicate no statistically significant correlation between FoMO and perfectionism in the current sample. In spite of theoretical assumptions linking these two constructs, no empirical basis for a relationship exists based on current data, perhaps because of contextual or sample issues.

**Table 4.3**

*Correlation between Perfectionism and Cognitive Distortions*

Variable	1	2
Perfectionism	-	0.19
CD	0.19	-

The second hypothesis also suggested a significant positive correlation between perfectionism and cognitive distortions. Table 4.3 presents the Spearman's rho value as  $r = 0.019$ , with  $p = 0.766$  significance level. This outcome indicates the presence of a very weak and non-significant positive correlation between the two variables. Since the p-value is higher than 0.05, the null hypothesis is maintained, meaning that there is no statistically significant correlation between cognitive distortions and perfectionism in this sample. This implies that higher or lower perfectionism levels do not forecast significant variations in cognitive distortions among this group, at least in the present study.



**Table 4.4***Correlation between FoMO and Cognitive Distortions*

Variable	1	2
FoMO	-	.396**
CD	.396**	-

The third hypothesis anticipated a positive significant connection between Fear of Missing Out (FoMO) and cognitive distortions. Table 4.4 presents a positive moderate correlation ( $r = 0.396$ ) between these two measures, which is statistically significant at the 0.01 level ( $p = .000$ ). This corroborates the hypothesis that the higher the level of FoMO, the greater the tendency to show cognitive distortions. This result is in accord with theoretical predictions and previous literature in that FoMO entailed maladaptive thought styles including catastrophizing, personalization, and dichotomous thinking, which are key components of cognitive distortions. The finding provides empirical evidence towards the psychological association between social fears and distorted thinking styles.

## EXPLORATORY ANALYSES

**Table 4.5***Gender Differences in FoMO*

Variable	N	Gender	Mean rank	U	Z	p-value
FoMO	204	Female	125.94			
	49	Male	131.40	4782.50	-0.469	0.639

Table 4.5 displays the result of Mann–Whitney U test conducted to explore differences in Fear of Missing Out (FoMO) between gender. The results show that the mean rank score is 131.40 for men and 125.94 for women. The calculated U value of 4782.50, with a Z value of -0.469, was not significant as the p-value is 0.639, which is higher than the 0.05 significance level.

This suggests that there is no significance difference between males and females in their experience of FoMO. Although the mean rank for males is slightly higher, indicating slightly higher susceptibility to FoMO for them, the difference is not large enough to be statistically significant.

There may be a valid reason why there have not been any substantial gender variations because FoMO is less to do with the use of social media and the need for psychological belonging, and more to do with gender. In the modern digital age, both male and female are equally engaged on the internet, subject to peer behavior, and influenced by the endless flow of information, and would therefore experience the same level of FoMO irrespective of gender.

This finding indicates that variables related to gender might not affect FoMO to the same extent; thus, any educational intervention or program to counter FoMO can be formulated in a gender-neutral fashion.

**Table 4.6**

*Gender Differences in Perfectionism*

Variable	N	Gender	Mean rank	U	Z	p-value
Perfectionism	204	Female	-	4867.50	-0.284	0.776
	49	Male	-			

Table 4.6 shows the result of the Mann-Whitney U test employed to determine gender differences in perfectionism. From the table, as can be seen, the calculated U value is 4867.50, with a Z of -0.284, and a p-value of 0.776, which is higher than the standard 0.05 level of significance.

This means that there is no statistically significant difference which is noted between males and females based on their perfectionism levels. Although it is possible that perfectionistic tendencies differ in people, the statistical findings show that the differences are not representative of enduring gender differences in the present sample.

One reason would be that perfectionism is to some extent influenced by personality, childhood, school or work requirements, and external social pressures, but not by gender. Both men and women in today's society are subjected to the same pressure to perform within school and society, and this can also equally influence the development of perfectionistic behavior.

Thus, this finding suggests that perfectionism does not seem to be a gendered trait in this specific context, and any prevention strategies or interventions against unhealthy perfectionism have to be gender-neutral.

**Table 4.7**

*Gender Differences in Cognitive Distortions*

Variable	N	Gender	Mean rank	U	Z	p-value
CD	204	Female	131.51	4078.00	-2.002	0.045
	49	Male	108.22			

Table 4.7 shows the outcome of the Mann-Whitney U test employed to find gender differences in cognitive distortions. The U value approximated is 4078.00, the Z score is -2.002, and the p-value is 0.045, revealing significance at the 0.05 level.

The findings show a difference in cognitive distortions between male and female participants in the present sample. The mean rank for females, which is calculated at 131.51, is greater than the male equivalent calculated at 108.22 and shows that females register higher cognitive distortions than male equivalents.

The gender difference seen may be a function of a range of psychosocial and affective factors. Studies have shown that females are more emotionally sensitive and ruminative, and these traits may lead in the direction of developing distorted cognitive schemas. The social and cultural expectations also may put women under greater psychological strain, thus making them more vulnerable to pathological cognition. Therefore, the results suggest that female participants in this research are more likely to be cognitively distorted, making gender-specific intervention necessary, with the focus being on negative thinking in young women.

**Table 4.8**

*FoMO predicting Cognitive Distortions*

Variable	B	SE B	$\beta$	t	p-value
Constant	-5.311	2.764	-	-1.922	.056
FoMO	0.729	0.110	.387	6.649	.000

The first regression analysis examined the degree to which Fear of Missing Out (FoMO) is a predictor of Cognitive Distortions (CD). The overall model was

significant, with FoMO predicting 15% of the variance in CD ( $R^2 = .150$ , Adjusted  $R^2 = .146$ ). FoMO regression coefficient was  $B = 0.729$ , indicating that a one-unit increase in FoMO is associated with an increase of about 0.73 units on cognitive distortion scores. The found effect was statistically significant,  $t(251) = 6.649$ ,  $p < .001$ , with a medium effect size ( $\beta = .387$ ). This indicates that high FoMO individuals are likely to have high cognitive distortions, thus confirming the assumption that exclusion- or disconnection-related concerns may be implicated in maladaptive thinking processes, such as catastrophizing or overgeneralization.

**Table 4.9**

*FoMO predicting Perfectionism*

Variable	B	SE B	$\beta$	t	p-value
FoMO	-0.010	-	-.010	-	0.880

The second regression examined whether FoMO by itself would be predictive of perfectionism levels. The result was a very weak and non-significant relationship,  $R^2 = .000$ ,  $\beta = -.010$ ,  $p = .880$ . This shows that FoMO has no effect on perfectionism scores when it is taken alone. The negative beta also indicates a reversed relationship, albeit very weak and not statistically significant. Thus, this model fails to establish a predictive association between FoMO and perfectionistic styles.

**Table 4.10***FoMO and Cognitive Distortions predicting Perfectionism*

Variable	B	SE B	$\beta$	t	p-value
FoMO	-	-	-.028	-	>.005
CD	-	-	.049	-	>.005

In the third regression, FoMO and CD were entered as predictors of Perfectionism. The model provided a very low  $R^2$  (.002), which means that these predictors as a whole explained only 0.2% of the variance in scores of perfectionism. Both predictors provided non-significant contributions:  $\beta = -.028$  for FoMO and  $\beta = .049$  for CD, with p-values  $> .05$ . This suggests that the FoMO and CD do not predict perfectionism when entered as a block, and the possibility that perfectionism might be explained by other unmeasured psychological characteristics or factors, for instance, personality, pressure to succeed, or self-esteem.

**Table 4.11***Perfectionism as a Mediator between FoMO and Cognitive Distortions*

Path	Predictor $\rightarrow$ Outcome	$\beta$	t	p
c	FoMO $\rightarrow$ CD	0.387	6.649	<.001
a	FoMO $\rightarrow$ Perfectionism	-0.010	-0.151	.880
b	Perfectionism $\rightarrow$ CD	0.041	0.710	.479
c'	FoMO & Perfectionism $\rightarrow$ CD	0.387	6.648	<.001

In order to analyze the underlying psychological processes between Fear of Missing Out (FoMO) and cognitive distortions, a mediation analysis was performed to assess the following to what extent perfectionism served as a mediating process in this relationship. The analysis followed the guidelines of Baron and Kenny (1986), examining the following pathways:

The first model tested if FoMO is a predictor of Cognitive Distortions. The model provided an  $R^2$  of .150, showing that 15% of the variance in CD was explained by FoMO. The relationship was significant statistically ( $\beta = 0.387$ ,  $t = 6.649$ ,  $p < .001$ ), establishing that increased levels of FoMO were linked with higher cognitive distortions. This result is consistent with prior literature (Elhai et al., 2020) that FoMO underlies maladaptive cognitive schemas like catastrophizing, personalization, and mind reading, which tend to be precipitated by social comparison through digital media.

The second pathway tested whether FoMO can predict Perfectionism. The regression outcome was non-significant ( $\beta = -0.010$ ,  $t = -0.151$ ,  $p = .880$ ), and model  $R^2$  was .000, with no predictive relationship between FoMO and perfectionistic tendencies. This implies that perfectionism can be an endogenous state derived from constant personality factors or developmental aspects, as opposed to external social sources such as FoMO.

Second, Perfectionism was examined as a predictor of Cognitive Distortions after controlling for FoMO. This pathway was also non-significant ( $\beta = 0.041$ ,  $t = 0.710$ ,  $p = .479$ ), indicating that even when controlling for FoMO, perfectionism does not have a significant contribution to cognitive distortions. The simultaneous model with FoMO and Perfectionism predicted 15.1% of the variance in CD ( $R^2 = .151$ ), but only FoMO continued as a significant predictor.

Lastly, mediation was examined. The direct effect (c') of FoMO on CD did not change and remained statistically significant ( $\beta = 0.387$ ,  $p < .001$ ), but the indirect effect via Perfectionism was non-significant. These results confirm that Perfectionism is not mediating the association between FoMO and Cognitive Distortions.

Finally, the mediation model was not confirmed. While FoMO was a strong predictor of Cognitive Distortions, Perfectionism was not a mediator of this association. This finding is at odds with theoretical predictions and indicates that alternative mediators or moderators, including emotional regulation, social anxiety, or self-esteem, are required to further examine the processes connecting FoMO and cognitive distortions among young adults.

**Table 4.12**

*Cognitive Distortions: High vs Low FoMO Groups*

FoMO Group	N	Mean rank	Sum of ranks	U	Z	p
Low FoMO	80	71.36	5708.5	2468.5	-2.27	.023*
High FoMO	78	87.85	6825.5			

Mann–Whitney U test was used to examine the difference in cognitive distortions between participants who were determined to have high or low levels of Fear of Missing Out (FoMO). The findings revealed a statistically significant difference in cognitive distortions between the two groups, where the findings indicated  $U = 2468.50$ ,  $Z = -2.270$ ,  $p = .023$ . Participants who were determined to be in the high FoMO group (Mean Rank = 87.85) scored significantly higher on cognitive



distortions than the participants in the low FoMO group (Mean Rank = 71.36). This reveals that people who score higher on FoMO tend to have distorted cognitivestyles, for example, catastrophizing or dichotomous thinking. These results imply that FoMO can be held accountable for the development or maintenance of maladaptive cognitive styles.

**Table 4.13**

Perfectionism: High vs Low FoMO Groups

FoMO Group	Mean rank	U	p
Low FoMO	77.76	2980.5	.627
High FoMO	81.29		

A Mann–Whitney U test was also carried out to examine the existence of significant differences between participants grouped as having high or low levels of Fear of Missing Out (FoMO) regarding levels of perfectionism. The results were not statistically significant,  $U = 2980.50$ ,  $p = .627$ , so there is no significant difference in overall perfectionism between both FoMO groups. While the high FoMO group's mean rank (81.29) was just slightly higher than the mean rank of the low FoMO group (77.76), the difference that was found was incredibly small and had no substantive impact. This suggests that while FoMO may be somehow related to cognitive distortions, it does not seem to directly affect the overall perfectionism tendencies among young adults.

**Table 4.14**

Perfectionism Subscales: High vs Low FoMO Groups

Subscale	U-value	p-value
Maladaptive	2988.50	.646
Standard	2915.00	.475

Further analysis was conducted to determine the differences between high and low perfectionism subtypes. i.e., maladaptive and standard between groups classified based on high and low Fear of Missing Out (FoMO). The findings in the Mann-Whitney U tests were not statistically significant for either maladaptive perfectionism ( $U = 2988.50$ ,  $p = .646$ ) or standard perfectionism ( $U = 2915.00$ ,  $p = .475$ ). The findings indicate that FoMO is not significantly distinguishing people based on how they pursue perfection or are sensitive to imperfection emotionally. The findings substantiate the earlier conclusion that FoMO might not be connected to perfectionism, even when measured at the subscale level.

## **Chapter 5**

### **Summary and Conclusion**

### **5.1 Summary of the Work**

The current research sought to investigate the association between Fear of Missing Out (FoMO), Perfectionism, and Cognitive Distortions in young adults, specifically if Perfectionism mediate the connection between FoMO and Cognitive Distortions. Data were gathered from a group of young adults with the use of standardized questionnaires for each variable. Because all three variables were discovered to be non-normally distributed, non-parametric tests were used.

Results of the correlation analysis indicated a significant, moderate positive correlation between FoMO and Cognitive Distortions. No significant correlations were observed between FoMO and Perfectionism or between Cognitive Distortions and Perfectionism. Gender comparison indicated that females rated significantly higher on Cognitive Distortions compared to males but no significant gender differences in FoMO or Perfectionism were observed.

Regression analysis validated that FoMO predicted Cognitive Distortions significantly and vice versa. Yet, FoMO did not strongly predict Perfectionism, and the interaction between FoMO and Cognitive Distortions did not predict Perfectionism. Mediation analysis based on the Baron and Kenny approach showed that Perfectionism did not mediate between FoMO and Cognitive Distortions. Lastly, group comparison analysis showed that those who scored high on FoMO reported much more Cognitive Distortions, yet there were no differences at the significant level in Perfectionism between high and low FoMO groups.

### **5.2 Conclusion**

The results of the current study point to the fact that although FoMO is significantly correlated with Cognitive Distortions, Perfectionism does not function in isolation

in this model. The absence of strong correlations and predictive values with Perfectionism suggests that it could be moderated by other psychological or situational factors not measured in this study. Additionally, Perfectionism was not an effective mediator between FoMO and Cognitive Distortions, which implies that the relationship between these variables was not as linear or direct as predicted.

### **5.3 Implications**

This research offers significant contributions to the understanding of psychological processes in young adults in the digital age, especially how Fear of Missing Out (FoMO) is strongly correlated with Cognitive Distortions. The implication from this correlation is that those who are often left out or alienated from social experiences may more likely engage in distorted or irrational thinking styles such as catastrophizing, overgeneralizing, or mind reading. These results highlight the critical need to treat FoMO in mental health treatments, particularly in college counseling, online wellness interventions, and youth cognitive-behavioral therapy (CBT).

The current research also adds to the body of work on psychological stressors associated with technology use, particularly in the Indian context. As social media use and digital connectivity remain on the increase, this study lends credibility to the integration of FoMO measures and interventions into models of youth mental health. Additionally, given that Perfectionism did not turn out to be a reliable mediator, it underscores the need against making presumptions about indirect pathways in the absence of empirical evidence. This promotes greater empirically informed testing of psychological models.

#### **5.4 Limitations**

1. Since a cross-sectional approach restricts the consideration of causality between variables, it cannot be concluded from the present study that FoMO causes or is a result of Cognitive Distortions. Only a correlation was established between FoMO and Cognitive Distortions.
2. The sample was taken from one particular demographic young adults and perhaps a limited geographic or educational level. Therefore, the findings may not be applicable to other age groups or populations.
3. The use of self-reported questionnaires can lead to social desirability biases or response style errors, which might impact the veracity of answers.
4. Perfectionism was examined as a mediator, but it could be the weakest or less suitable explanatory mechanism. Alternative mediators, including emotion regulation problems or self-esteem, were not assessed.
5. The study did not explore moderating variables such as gender, social media usage time, or psychological resilience, which could influence the strength of the FoMO-CD relationship.

#### **5.5 Suggestions for Further Research**

1. Future research can use longitudinal or experimental designs to determine the causal direction between FoMO and Cognitive Distortions and to track changes over time.
2. As Perfectionism did not prove to be a mediator, the researchers might also study other possible mediating factors like emotion dysregulation, self-concept clarity, neuroticism, or social anxiety.

3. Examining if factors like gender, coping styles, or social media usage pattern moderate the relation might offer a better insight.
4. Future research can involve young adults from diverse socioeconomic, cultural, and educational backgrounds to increase generalizability across populations.
5. Developing and evaluating intervention modules to minimize FoMO and examining their effects on cognitive distortions can translate research into direct application, particularly in college populations.
6. The inclusion of qualitative interviews or open-ended questions might reveal more detailed, richer accounts of the ways in which FoMO impacts thinking among young adults.

## References

- 10 cognitive distortions that are just adding to our stress.* (2007, November 29). Verywell Mind. <https://www.verywellmind.com/cognitive-distortions-and-stress-3144921>
- Abel, G. G., Gore, D. K., Holland, C. L., Camps, N., Becker, J. V., & Rathner, J. (1989). The measurement of the cognitive distortions of child molesters. *Annals of Sex Research*, 2(2), 135-152. <https://doi.org/10.1007/bf00851319>
- Abel, J. P., Buff, C. L., & Burr, S. A. (2016). Social media and the fear of missing out: Scale development and assessment. *Journal of Business & Economics Research (JBER)*, 14(1), 33-44. <https://doi.org/10.19030/jber.v14i1.9554>
- Agnihotri, S., & Ravi Shanker, D. (2023). Association between cognitive distortions and problematic internet use among students during the COVID-19 pandemic. *Children and Youth Services Review*, 155, 107214. <https://doi.org/10.1016/j.childyouth.2023.107214>
- Aral, A. E., Sarisoy, G., & Aral, A. (2023). Cognitive distortions and perfectionism during bipolar and unipolar depressive episode. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, 59(1). <https://doi.org/10.1186/s41983-023-00749-w>
- Attention required!* (n.d.). Attention Required! | Cloudflare. <https://statisticsbyjim.com/basics/spearmans-correlation/>
- Attention required!* (n.d.). Attention Required! | Cloudflare. <https://www.statisticshowto.com/probability-and-statistics/statistics-definitions/kruskal-wallis/>
- Avcı, A., & Ünal, A. S. (2024). Assessment of internet and social media addiction levels in adolescents aged 12–18 years by nurses: A multicenter



- cross-sectional study. *Journal of Child and Adolescent Psychiatric Nursing*, 37(4). <https://doi.org/10.1111/jcap.70004>
- Barriga, A. Q., Landau, J. R., Stinson, B. L., Liau, A. K., & Gibbs, J. C. (2000). Cognitive distortion and problem behaviors in adolescents. *Criminal Justice and Behavior*, 27(1), 36-56. <https://doi.org/10.1177/0093854800027001003>
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. International Universities Press.
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*.
- Bevans, R. (2023, June 22). *Simple linear regression | An easy introduction & examples*. Scribbr. <https://www.scribbr.com/statistics/simple-linear-regression/>
- Błachnio, A., & Przepiórka, A. (2018). Facebook intrusion, fear of missing out, narcissism, and life satisfaction: A cross-sectional study. *Psychiatry Research*, 259, 514-519. <https://doi.org/10.1016/j.psychres.2017.11.012>
- Blackwell, D., Leaman, C., Tramposch, R., Osborne, C., & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. *Personality and Individual Differences*, 116, 69-72. <https://doi.org/10.1016/j.paid.2017.04.039>
- Bowman, N. D., & Gordon, C. V. (2019). Fear of missing out scale. In *Communication research measure III* (1st ed., pp. 265-268). Routledge. <https://doi.org/10.4324/9780203730188-29>
- Browne, B. L., Aruguete, M. S., McCutcheon, L. E., & Medina, A. M. (2018). Social and emotional correlates of the fear of missing out. *North American Journal of Psychology*, 20(2).
- Burns, D. D. (2012). *Feeling good: The new mood therapy*. HarperCollins.

- Carneiro, A. M., Pereira, D. A., Fernandes, F., Baptista, M. N., Brunoni, A. R., & Moreno, R. A. (2023). Distorted thoughts as a mediator of depressive symptoms in patients with major depressive disorder: A longitudinal study. *Health and Quality of Life Outcomes*, 21(1). <https://doi.org/10.1186/s12955-023-02178-y>
- Chen, L., Chen, G., Wang, S., & Jiang, L. (2023). The effect of perfectionism on consumers' intentions to purchase imperfect products. *Behavioral Sciences*, 13(3), 269. <https://doi.org/10.3390/bs13030269>
- 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>
- Chęć, M., Konieczny, K., Michałowska, S., & Rachubińska, K. (2025). Exploring the dimensions of perfectionism in adolescence: A multi-method study on mental health and CBT-based Psychoeducation. *Brain Sciences*, 15(1), 91. <https://doi.org/10.3390/brainsci15010091>
- Couper, M. P. (2000). Web surveys. *Public Opinion Quarterly*, 64(4), 464-494. <https://doi.org/10.1086/318641>
- Covin, R., Dozois, D. J., Ogniewicz, A., & Seeds, P. M. (2011). Measuring cognitive errors: Initial development of the cognitive distortions scale (CDS). *International Journal of Cognitive Therapy*, 4(3), 297-322. <https://doi.org/10.1521/ijct.2011.4.3.297>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.

- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. [https://doi.org/10.1207/s15327965pli1104\\_01](https://doi.org/10.1207/s15327965pli1104_01)
- Demir, M. (2025). *Exploring Young Adults' Attitudes and Experiences with Fear of Missing Out: A Qualitative Interview Study on Anxiety and Perfectionism* (Bachelor's thesis, University of Twente).
- Dempsey, A. E., O'Brien, K. D., Tiarniyu, M. F., & Elhai, J. D. (2019). Fear of missing out (FoMO) and rumination mediate relations between social anxiety and problematic Facebook use. *Addictive Behaviors Reports*, 9, 100150. <https://doi.org/10.1016/j.abrep.2018.100150>
- Downey, C. A., Reinking, K. R., Gibson, J. M., Cloud, J. A., & Chang, E. C. (2014). Perfectionistic cognitions and eating disturbance: Distinct mediational models for males and females. *Eating Behaviors*, 15(3), 419-426. <https://doi.org/10.1016/j.eatbeh.2014.04.020>
- Duman, N. (2018). A Research on Cognitive Distortion in Working Adults. *Journal of Current Researches on Social Sciences*, 8(3), 1-10.
- Elhai, J. D., Levine, J. C., Dvorak, R. D., & Hall, B. J. (2017). Non-social features of smartphone use are most related to depression, anxiety and problematic smartphone use. *Computers in Human Behavior*, 69, 75-82. <https://doi.org/10.1016/j.chb.2016.12.023>
- Elhai, J. D., Yang, H., Rozgonjuk, D., & Montag, C. (2020). Using machine learning to model problematic smartphone use severity: The significant role of fear of missing out. *Addictive Behaviors*, 103, 106261. <https://doi.org/10.1016/j.addbeh.2019.106261>

- Elhai, J. D., Yang, H., & Montag, C. (2021). Fear of missing out (FOMO): Overview, theoretical underpinnings, and literature review on relations with severity of negative affectivity and problematic technology use. *Brazilian Journal of Psychiatry*, 43(2), 203-209. <https://doi.org/10.1590/1516-4446-2020-0870>
- Flamenbaum, R., & Holden, R. R. (2007). Psychache as a mediator in the relationship between perfectionism and suicidality. *Journal of Counseling Psychology*, 54(1), 51-61. <https://doi.org/10.1037/0022-0167.54.1.51>
- Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. *Perfectionism: Theory, research, and treatment*, 5-31. <https://doi.org/10.1037/10458-001>
- 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>
- Freeman, A., & Felgoise, S. (2005). Cognitive Distortions. In *Encyclopedia of cognitive behavior therapy* (p. 117–122). Taylor & Francis.
- Frost, R. O., & Henderson, K. J. (1991). Perfectionism and reactions to athletic competition. *Journal of Sport and Exercise Psychology*, 13(4), 323-335. <https://doi.org/10.1123/jsep.13.4.323>
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14(5), 449-468. <https://doi.org/10.1007/bf01172967>
- Google search. (n.d.). <https://real-statistics.com/multiple-regression/mediation-analysis/mediation-analysis-basics/>

Google search. (n.d.). <https://researchmethod.net/descriptive-statistics/>

Groenestein, E., Willemsen, L., Van Koningsbruggen, G. M., & Kerkhof, P. (2024).

Exploring the dimensionality of fear of missing out: Associations with related constructs. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 18(1). <https://doi.org/10.5817/cp2024-1-4>

Hartanto, A., Wong, J., Lua, V. Y., Tng, G. Y., Kasturiratna, K. T., & Majeed, N. M.

(2022). A daily diary investigation of the fear of missing out and diminishing daily emotional well-being: The moderating role of cognitive reappraisal. *Psychological Reports*, 127(3), 1117-1155. <https://doi.org/10.1177/00332941221135476>

Hartanto, A., Wong, J., Lua, V. Y., Tng, G. Y., Kasturiratna, K. T., & Majeed, N. M.

(2022). A daily diary investigation of the fear of missing out and diminishing daily emotional well-being: The moderating role of cognitive reappraisal. *Psychological Reports*, 127(3), 1117-1155. <https://doi.org/10.1177/00332941221135476>

Heo, J., Petscher, Y., & Paek, I. (2024). How are perfectionism groups determined

among Korean college students? Applying the Best-Fitting short form of Hewitt and Flett's multidimensional perfectionism scale (HF-MPS) to a Korean sample. *Psychology International*, 6(4), 1028-1039. <https://doi.org/10.3390/psycholint6040064>

Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts:

Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456-470. <https://doi.org/10.1037//0022-3514.60.3.456>

- Hewitt, P. L., Flett, G. L., & Mikail, S. F. (2017). *Perfectionism: A relational approach to conceptualization, assessment, and treatment*. Guilford Publications.
- Ijaz, T., & Khalid, A. (2020). Perfectionism and academic burnout: The mediating role of worry and depressive rumination in University students. *Pakistan Journal of Psychological Research*, 35(3), 473-492. <https://doi.org/10.33824/pjpr.2020.35.3.25>
- Juwono, I. D., Kun, B., Demetrovics, Z., & Urbán, R. (2022). Healthy and unhealthy dimensions of perfectionism: Perfectionism and mental health in Hungarian adults. *International Journal of Mental Health and Addiction*, 21(5), 3017-3032. <https://doi.org/10.1007/s11469-022-00771-8>
- Kareem, M. A., & Al-Munif, N. M. (2025). An exploratory study on the interaction between fear of missing out (FoMO) and rumination in increasing social anxiety and excessive social media use among University students. *Journal of Ecohumanism*, 4(1). <https://doi.org/10.62754/joe.v4i1.6481>
- Larionow, P. (2024). How are different perfectionism traits related to mental health in students? *Behavioral Sciences*, 14(3), 187. <https://doi.org/10.3390/bs14030187>
- Lefebvre, M. F. (1981). Cognitive distortion and cognitive errors in depressed psychiatric and low back pain patients. *Journal of Consulting and Clinical Psychology*, 49(4), 517-525. <https://doi.org/10.1037//0022-006x.49.4.517>
- Li, X., & Ye, Y. (2022). Fear of missing out and irrational procrastination in the mobile social media environment: A moderated mediation analysis. *Cyberpsychology, Behavior, and Social Networking*, 25(1), 59-65. <https://doi.org/10.1089/cyber.2021.0052>

- Linear regression in machine learning*. (2025, July 11). GeeksforGeeks.  
<https://www.geeksforgeeks.org/machine-learning/ml-linear-regression/>
- Mann and Whitney U test*. (2025, July 5). GeeksforGeeks.  
<https://www.geeksforgeeks.org/machine-learning/mann-and-whitney-u-test/>
- Milyavskaya, M., Philippe, F. L., & Koestner, R. (2013). Psychological need satisfaction across levels of experience: Their organization and contribution to general well-being. *Journal of Research in Personality*, 47(1), 41-51.  
<https://doi.org/10.1016/j.jrp.2012.10.013>
- Morrison, A. S., Ustun, B., Horenstein, A., Kaplan, S. C., De Oliveira, I. R., Batmaz, S., Gross, J. J., Sadikova, E., Hemanny, C., Pires, P. P., Goldin, P. R., Kessler, R. C., & Heimberg, R. G. (2022). Optimized short-forms of the cognitive distortions questionnaire. *Journal of Anxiety Disorders*, 92, 102624.  
<https://doi.org/10.1016/j.janxdis.2022.102624>
- Nagata, J. M., Al-Shoaibi, A. A., Leong, A. W., Zamora, G., Testa, A., Ganson, K. T., & Baker, F. C. (2024). Screen time and mental health: A prospective analysis of the adolescent brain cognitive development (ABCD) study. *BMC Public Health*, 24(1). <https://doi.org/10.1186/s12889-024-20102-x>
- Neuman, W. L. (2003). *Social research Methods: Qualitative and quantitative approaches: Pearson new international edition* (5th ed.). Pearson Education.
- Oberoi, S., Raghavan, V., & Iyer, P. (2022). Smartphone addiction and fear of missing out (FoMO) among urban Indian college students. *Asian Journal of Psychiatry*, 72, 102790. <https://doi.org/10.1016/j.ajp.2022.102790>
- Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2016). Negative consequences from heavy social networking in adolescents: The mediating

- role of fear of missing out. *Journal of Adolescence*, 55(1), 51-60.  
<https://doi.org/10.1016/j.adolescence.2016.12.008>
- O'Connor, R. C. (2007). The relations between perfectionism and suicidality: A systematic review. *Suicide and Life-Threatening Behavior*, 37(6), 698-714.  
<https://doi.org/10.1521/suli.2007.37.6.698>
- Ouhmad, N., Deperrois, R., El Hage, W., & Combalbert, N. (2023). Cognitive distortions, anxiety, and depression in individuals suffering from PTSD. *International Journal of Mental Health*, 53(4), 336-352.  
<https://doi.org/10.1080/00207411.2023.2219950>
- Piko, B. F., Müller, V., Kiss, H., & Mellor, D. (2025). Exploring contributors to FoMO (fear of missing out) among university students: The role of social comparison, social media addiction, loneliness, and perfectionism. *Acta Psychologica*, 253, 104771. <https://doi.org/10.1016/j.actpsy.2025.104771>
- 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>
- Rice, K. G., Leever, B. A., Christopher, J., & Porter, J. D. (2006). Perfectionism, stress, and social (dis)connection: A short-term study of hopelessness, depression, and academic adjustment among honors students. *Journal of Counseling Psychology*, 53(4), 524-534. <https://doi.org/10.1037/0022-0167.53.4.524>
- Sari, I., & Radu, E. (2025). Media exposure and perfectionism: The mediating role of fear of missing out. *Journal of Adolescent and Youth Psychological Studies*, 6(3), 152-160. <https://doi.org/10.61838/kman.jayps.6.3.17>



- Shafran, R., & Mansell, W. (2001). Perfectionism and psychopathology: A review of research and treatment. *Clinical Psychology Review*, 21(6), 879-906. [https://doi.org/10.1016/s0272-7358\(00\)00072-6](https://doi.org/10.1016/s0272-7358(00)00072-6)
- Short revised almost perfect scale (SAPS). (n.d.). PsyToolkit. [https://www.psychtoolkit.org/survey-library/perfectionism-saps.html#\\_introduction](https://www.psychtoolkit.org/survey-library/perfectionism-saps.html#_introduction)
- Sireli, O., Dayi, A., & Colak, M. (2023). The mediating role of cognitive distortions in the relationship between problematic social media use and self-esteem in youth. *Cognitive Processing*, 24(4), 575-584. <https://doi.org/10.1007/s10339-023-01155-z>
- Smith, M. M., Saklofske, D. H., Stoeber, J., & Sherry, S. B. (2016). The big three perfectionism scale. *Journal of Psychoeducational Assessment*, 34(7), 670-687. <https://doi.org/10.1177/0734282916651539>
- Soltani, M., Salehi, B., & Kheirabadi, G. (2024). Explaining the relationship between perfectionism and binge eating disorder in female college students: The mediating role of cognitive emotion regulation. *Practice in Clinical Psychology*, 12(1), 67-80. <https://doi.org/10.32598/jpcp.12.1.919.1>
- Spearman's rank correlation. (2025, July 15). GeeksforGeeks. <https://www.geeksforgeeks.org/data-science/spearmans-rank-correlation/>
- Srivastava, S., Rishi, B., & Belwal, R. (2024). Linking fear of missing out and psychological well-being: A multi-country study. *Journal of Consumer Marketing*, 41(4), 391-405. <https://doi.org/10.1108/jcm-02-2023-5837>
- Stevenson, J., & Akram, U. (2022). Self-critical thinking mediates the relationship between perfectionism and perceived stress in undergraduate students: A longitudinal study. <https://doi.org/10.21203/rs.3.rs-1413359/v1>

- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10(4), 295-319. [https://doi.org/10.1207/s15327957pspr1004\\_2](https://doi.org/10.1207/s15327957pspr1004_2)
- Stricker, J., Buecker, S., Schneider, M., & Preckel, F. (2019). Multidimensional perfectionism and the Big Five personality traits: A meta-analysis. *European Journal of Personality*, 33(2), 176-196. <https://doi.org/10.1002/per.2186>
- Terry-Short, L., Owens, R., Slade, P., & Dewey, M. (1995). Positive and negative perfectionism. *Personality and Individual Differences*, 18(5), 663-668. [https://doi.org/10.1016/0191-8869\(94\)00192-u](https://doi.org/10.1016/0191-8869(94)00192-u)
- T-Test, CHI-square, ANOVA, regression, correlation...* (n.d.). Online Statistics Calculator: Hypothesis testing, t-test, chi-square, regression, correlation, analysis of variance, cluster analysis. <https://datatab.net/tutorial/test-of-normality>
- Umeh, C. S. (2013). *Assessment and management of shyness using group cognitive behavioural therapy among selected Nigerian adolescents: child & adolescent therapy and e-therapy*. Sabinet. <https://hdl.handle.net/10520/EJC138719>
- Van Loon, A. W., Creemers, H. E., Vogelaar, S., & Asscher, J. J. (2025). What works for whom? The influence of problem severity, maladaptive perfectionism, and perceived parental pressure on the effectiveness of a school-based performance anxiety program. *Behavioral Sciences*, 15(4), 436. <https://doi.org/10.3390/bs15040436>
- Varchetta, M., Frascetti, A., Mari, E., & Giannini, A. M. (2020). Social media addiction, fear of missing out (FoMO) and online vulnerability in university students. *Revista Digital de Investigación en Docencia Universitaria*, 14(1), e1187.

- Wan, J., & Zhou, Z. (2025). The relationship between state-fear of missing out, loneliness, adaptive perfectionism and social media use in university students: A questionnaire and intervention study. *BMC Psychology*, 13(1). <https://doi.org/10.1186/s40359-025-03090-4>
- Xiong, Z., Liu, C., Song, M., & Ma, X. (2024). The relationship between maladaptive perfectionism and anxiety in first-year undergraduate students: A moderated mediation model. *Behavioral Sciences*, 14(8), 628. <https://doi.org/10.3390/bs14080628>
- Zaremohzzabieh, Z., Abdullah, H., Ahrari, S., Abdullah, R., & Md Nor, S. M. (2024). Exploration of vulnerability factors of digital hoarding behavior among university students and the moderating role of maladaptive perfectionism. *DIGITAL HEALTH*, 10. <https://doi.org/10.1177/20552076241226962>
- Zhang, Y., Shang, S., Tian, L., Zhu, L., & Zhang, W. (2023). The association between fear of missing out and mobile phone addiction: A meta-analysis. *BMC Psychology*, 11(1). <https://doi.org/10.1186/s40359-023-01376-z>

## **Appendices**

### **Informed Consent Information Sheet**

Dear participant

As a participant of the study, before you decide to take part in this study, it is important to understand a few things regarding the study. Please feel free to ask the researcher if there is anything that is not clear or if you need more information.

The topic of the study is **‘Fear of Missing Out, Perfectionism and Cognitive Distortions Among Young Adults’**.

Carefully go through each of the statements given in the following section and indicate your responses to them from the provided response categories. This procedure may take a maximum of 7-10 minutes of your valuable time. Your response to this study will be kept confidential. Every effort will be made by the researcher to preserve your confidentiality. Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in the study. You can indicate your consent by ticking the box given below. If you have any questions or further clarifications about the study, you can contact the researcher via mail.

### **Participant Consent Form**

I confirm that I have been informed about the purpose of this study and have received answers to any queries I had. I freely agree to participate in this research study of my own will.

I agree

**Socio-Demographic Details**

Name : \_\_\_\_\_

Age : \_\_\_\_\_

Year of Birth : 1995-2007/2008-2022

Gender : Male/Female/Other

Educational Qualifications : Higher Secondary/Undergraduate/Postgraduate/

M Phil/PhD/Other

Current Status: Student/Working Professional/Job Seeker/Homemaker/Other

Place of Residence: Urban/Rural

**Fear of Missing Out Scale (Przybylski, K. et al. , 2013)**

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

I fear others have more rewarding experiences than me.

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

I fear my friends have more rewarding experiences than me.

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

I get worried when I find out my friends are having fun without me.

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

I get anxious when I don't know what my friends are up to.

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

It is important that I understand my friends "in jokes".

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

Sometimes, I wonder if I spend too much time keeping up with what is going on.

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

It bothers me when I miss an opportunity to meet up with friends.

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

When I have a good time it is important for me to share the details online (e.g. updating status).

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

When I miss out on a planned get together it bothers me.

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

When I go on vacation, I continue to keep tabs on what my friends are doing.

1. Not at all true of me      2. Slightly true of me      3. Moderately true of me  
4. Very true      5. Extremely true of me

**Short Almost Perfect Scale - Revised (Rice, K. G., Richardson, C. M. E., & Tueller, S, 2014)**

The following statements reflect how you may think, feel, or behave in daily life. Please read each statement carefully and indicate how much you agree or disagree using the scale below.

I have high expectations for myself

- |                      |             |                      |            |
|----------------------|-------------|----------------------|------------|
| 1. Strongly disagree | 2. Disagree | 3. Slightly disagree | 4. Neutral |
| 5. Slightly agree    | 6. Agree    | 7. Strongly agree    |            |

Doing my best never seems to be enough

- |                      |             |                      |            |
|----------------------|-------------|----------------------|------------|
| 1. Strongly disagree | 2. Disagree | 3. Slightly disagree | 4. Neutral |
| 5. Slightly agree    | 6. Agree    | 7. Strongly agree    |            |

I set very high standards for myself

- |                      |             |                      |            |
|----------------------|-------------|----------------------|------------|
| 1. Strongly disagree | 2. Disagree | 3. Slightly disagree | 4. Neutral |
| 5. Slightly agree    | 6. Agree    | 7. Strongly agree    |            |

I often feel disappointment after completing a task because I know I could have done better.

- |                      |             |                      |            |
|----------------------|-------------|----------------------|------------|
| 1. Strongly disagree | 2. Disagree | 3. Slightly disagree | 4. Neutral |
| 5. Slightly agree    | 6. Agree    | 7. Strongly agree    |            |

I have a strong need to strive for excellence

- |                      |             |                      |            |
|----------------------|-------------|----------------------|------------|
| 1. Strongly disagree | 2. Disagree | 3. Slightly disagree | 4. Neutral |
| 5. Slightly agree    | 6. Agree    | 7. Strongly agree    |            |



My performance rarely measures up to my standards

- |                      |             |                      |            |
|----------------------|-------------|----------------------|------------|
| 1. Strongly disagree | 2. Disagree | 3. Slightly disagree | 4. Neutral |
| 5. Slightly agree    | 6. Agree    | 7. Strongly agree    |            |

I expect the best from myself

- |                      |             |                      |            |
|----------------------|-------------|----------------------|------------|
| 1. Strongly disagree | 2. Disagree | 3. Slightly disagree | 4. Neutral |
| 5. Slightly agree    | 6. Agree    | 7. Strongly agree    |            |

I am hardly ever satisfied with my performance

- |                      |             |                      |            |
|----------------------|-------------|----------------------|------------|
| 1. Strongly disagree | 2. Disagree | 3. Slightly disagree | 4. Neutral |
| 5. Slightly agree    | 6. Agree    | 7. Strongly agree    |            |

**Cognitive Distortions Questionnaire - Short Form (de Oliveira, I. R. et al., 2015)**

Please think about the past week. For each statement below, rate how often this type of thought occurred (Frequency) and how strongly you believed it (Intensity) when it occurred.

In the past week, how often did you think: "If I don't do it perfectly, I've failed."

1. Did not occur      2. Occasionally [1-2 days]      3. Much of the time [3-5 days]  
4. Almost of the time [6-7 days]

When this thought occurred, how strongly did you believe it?

Not at all at all      0      1      2      3      Very much (more than 70%)

In the past week, how often did you think: "I'm a total loser because I made a mistake."

1. Did not occur      2. Occasionally [1-2 days]      3. Much of the time [3-5 days]  
4. Almost of the time [6-7 days]

When this thought occurred, how strongly did you believe it?

Not at all at all      0      1      2      3      Very much (more than 70%)

In the past week, how often did you think: "If I miss this, everything will go wrong."

1. Did not occur      2. Occasionally [1-2 days]      3. Much of the time [3-5 days]  
4. Almost of the time [6-7 days]

When this thought occurred, how strongly did you believe it?

Not at all at all      0      1      2      3      Very much (more than 70%)

In the past week, how often did you think: "I should always be productive or I'm lazy."

1. Did not occur      2. Occasionally [1-2 days]      3. Much of the time [3-5 days]  
4. Almost of the time [6-7 days]

When this thought occurred, how strongly did you believe it?

Not at all      0      1      2      3      Very much (more than 70%)

In the past week, how often did you think: "That small error totally ruined my whole work."

1. Did not occur      2. Occasionally [1-2 days]      3. Much of the time [3-5 days]  
4. Almost of the time [6-7 days]

When this thought occurred, how strongly did you believe it?

Not at all      0      1      2      3      Very much (more than 70%)

In the past week, how often did you think: "Yes, I succeeded, but it doesn't count."

1. Did not occur      2. Occasionally [1-2 days]      3. Much of the time [3-5 days]  
4. Almost of the time [6-7 days]

When this thought occurred, how strongly did you believe it?

Not at all      0      1      2      3      Very much (more than 70%)

In the past week, how often did you think: "It's my fault that my friends didn't enjoy the event."

1. Did not occur      2. Occasionally [1-2 days]      3. Much of the time [3-5 days]  
4. Almost of the time [6-7 days]

When this thought occurred, how strongly did you believe it?

Not at all all                      0      1      2      3                      Very much (more than 70%)