

Research on Mechanisms for Promoting Mental Well-Being among College Students in a Digitally Dependent Context: An Analysis based on Conceptual Models

Ting Jing*

Guangdong Preschool Normal College in Maoming, Maoming, Guangdong 525000, China

*Corresponding Author

Abstract

The widespread use of smartphones among university students has raised increasing concerns regarding problematic smartphone use and its negative impact on mental well-being. Grounded in the stress-vulnerability model and social cognitive theory, this study constructs a theoretical model to investigate the mechanisms linking smartphone addiction (SPA) and university students' mental well-being (MWB), with social anxiety (SA) as a mediating variable. The study proposes that SPA exerts a negative influence on MWB, both directly and indirectly, through the mediating role of SA. Theoretical implications emphasize the necessity of integrating digital behavior governance with psychological support systems in higher education, while practical contributions highlight the importance of targeted interventions to mitigate smartphone addiction and enhance student well-being. Future research directions are discussed, including the exploration of moderating variables and cross-cultural validation.

Keywords

Smartphone Addiction; Social Anxiety; Mental Well-Being; Theoretical Model.

1. Introduction

The digital era has profoundly reshaped patterns of learning, communication, and lifestyle among university students, who are often described as "digital natives." While smartphones provide convenience and social connectedness, their excessive use can lead to maladaptive patterns known as smartphone addiction (SPA). SPA exhibits behavioral addiction symptoms similar to substance-related disorders, including craving, loss of control, and withdrawal [1]. Mental well-being (MWB), as conceptualized within positive psychology, emphasizes not only the absence of mental illness but also the presence of positive resources, such as resilience, optimism, and meaning in life. However, SPA appears to undermine these psychological resources, eroding students' overall well-being [2].

A critical pathway connecting SPA and MWB lies in social anxiety (SA). University students, during the stage of identity formation and peer acceptance, are particularly vulnerable to heightened concerns about social evaluation. Excessive smartphone use, especially on social media, often amplifies these anxieties through mechanisms such as fear of missing out (FoMO), excessive self-presentation, and sensitivity to online feedback [3]. These factors contribute to persistent social anxiety, which in turn undermines mental well-being [4].

Despite growing attention, prior studies often focus on direct associations between SPA and psychological distress, neglecting the mediating processes that link SPA to positive psychological constructs such as MWB. Moreover, existing studies tend to adopt clinical psychology frameworks, while insufficiently integrating educational and developmental psychology perspectives that are crucial for designing preventive and supportive systems within higher education.

Therefore, this study aims to construct a theoretical model to explicate the mechanism through which SPA influences MWB, highlighting the mediating role of SA. By doing so, it contributes to both theoretical development and practical implications for psychological interventions and educational governance in universities.

2. Literature Review

2.1. Smartphone Addiction and Psychological Outcomes

Smartphone addiction (SPA) is increasingly recognized as a subtype of behavioral addiction that manifests through compulsive and uncontrolled smartphone usage, typically associated with symptoms such as salience, withdrawal, tolerance, and functional impairment [5]. Among university students, SPA has been linked to a range of negative psychological and behavioral outcomes. Squires et al. noted that excessive smartphone use is associated with increased levels of depression, anxiety, and stress, often mediated by maladaptive emotion regulation strategies [6]. Neuroimaging studies have further confirmed that SPA correlates with structural abnormalities in the prefrontal cortex and anterior cingulate gyrus-brain regions responsible for impulse control and emotional regulation [7]. These biological findings support the conceptualization of SPA as a clinically relevant behavioral disorder with both cognitive and emotional consequences.

Particularly in the university student population, where developmental tasks include identity formation and autonomy building, the consequences of SPA may be especially detrimental. From a psychological mechanism perspective, SPA contributes to chronic cognitive overload and emotional dysregulation. Constant exposure to fragmented digital stimuli leads to attentional fatigue, increased emotional reactivity, and lowered frustration tolerance [8]. These patterns cumulatively undermine individuals' capacity for psychological resilience and positive emotional experiences.

2.2. Social Anxiety and Digital Media Use

Social anxiety (SA) is a common psychological condition characterized by excessive fear of negative evaluation, embarrassment, or rejection in social situations. The disorder often leads to avoidance behaviors and heightened self-consciousness, particularly in situations involving unfamiliar individuals or performance demands [9]. With the rise of digital communication platforms, the expression of SA has been extended to online contexts, often referred to as cyber social anxiety or social media anxiety.

Digital platforms, while providing avenues for social interaction, paradoxically intensify SA by creating environments that encourage constant social comparison and public self-presentation [10]. Features such as likes, comments, and follower counts become quantitative metrics of social validation, pushing vulnerable individuals toward maladaptive monitoring and rumination. This is particularly true for university students, who are developmentally attuned to peer feedback and social status, and may excessively monitor others' responses to their digital presence [11]. From a stress process perspective, SA can be conceptualized as a maladaptive stress response triggered by the social demands of digital engagement, mediating the impact of SPA on emotional well-being.

2.3. Mental Well-Being in the University Student Population

Mental well-being (MWB) refers to the presence of positive psychological functioning and emotional vitality, encompassing dimensions such as life satisfaction, psychological flourishing, autonomy, personal growth, and purpose in life [12]. Unlike traditional models of mental health that emphasize the absence of pathology, MWB emphasizes the presence of optimal functioning.

In the context of university students, MWB plays a foundational role in academic achievement, social integration, and long-term psychosocial adjustment. Students with high MWB exhibit stronger motivation, better coping skills, and greater resilience in the face of stressors [13]. Conversely, compromised MWB is associated with absenteeism, reduced academic performance, and increased vulnerability to mental illness.

Additionally, social anxiety has been found to negatively predict MWB. Anxious individuals report lower levels of life satisfaction, diminished optimism, and reduced perceived social support [14]. In university populations, where social networks play a central role in emotional resilience, this link is particularly strong.

Thus, there is mounting theoretical and empirical justification for examining MWB as an outcome of both behavioral (SPA) and emotional (SA) predictors. Clarifying these relationships can contribute to a deeper understanding of how digital lifestyles interact with the development of positive psychological states in emerging adulthood.

3. Methodology

This study aims to explore the relationships among smartphone addiction, social anxiety, and mental well-being among university students. To ensure the scientific rigor and validity of the findings, a mixed-methods approach was adopted, combining quantitative and qualitative techniques to yield more comprehensive and nuanced insights.

First, a thorough literature review was conducted to establish the theoretical foundation and research framework. This involved a systematic retrieval and analysis of previous theoretical and empirical studies-both domestic and international-on smartphone addiction, social anxiety, and mental well-being among university students. The research hypotheses were developed based on established theories including Stress-Vulnerability Model, Social Cognitive Theory.

In the data collection phase, a structured questionnaire survey was employed as the primary instrument. The questionnaire consisted of three sections. The first section assessed the degree of smartphone addiction using a revised and localized version of the Smartphone Addiction Scale–Short Version (SAS-SV). The second section measured levels of social anxiety through the Social Anxiety Scale–Social Media Use (SAS-SMU), with cultural and contextual adaptations. The third section assessed mental well-being using the Warwick–Edinburgh Mental Well-being Scale (WEMWBS), which covers dimensions such as life satisfaction, positive affect, personal growth, and social connectedness. To ensure content validity and cultural appropriateness, all scales were reviewed and pre-tested by experts in psychology and education.

Participants were drawn from various types of higher education institutions, including comprehensive universities and vocational colleges, to ensure diversity and representativeness. Data analysis was conducted using SmartPLS. The main analytic techniques included descriptive statistics, Pearson correlation analysis, and structural equation modeling (SEM). Descriptive statistics were used to describe the basic characteristics of the sample. Correlation analysis examined the bivariate relationships among the variables. SEM and regression analyses were applied to test the hypothesized mediation model and identify the structural pathways, particularly focusing on the mediating role of social anxiety.

To enrich the findings and enhance credibility, qualitative methods were also employed. Follow-up interviews were conducted with a subset of participants selected from the survey sample, focusing on their personal experiences with smartphone use, anxiety during social media engagement, and subjective perceptions of mental well-being. Additionally, a case study approach was used to examine specific institutions, providing contextualized understanding of how smartphone addiction and social anxiety manifest and influence mental well-being in different educational settings.

In summary, this study employed a multi-method research design that integrates theoretical, quantitative, and qualitative approaches to ensure the validity and richness of its conclusions. By systematically investigating the relationships among smartphone addiction, social anxiety, and mental well-being, the study aims to contribute both theoretically and practically to the fields of psychological health education, digital behavior management, and student support systems in higher education.

4. Research Content

4.1. Smartphone Addiction

4.1.1. Theoretical Connotation of Smartphone Addiction

Smartphone addiction is conceptualized as a behavioral addiction, characterized by excessive, compulsive, and dysfunctional smartphone use that significantly interferes with individuals' daily functioning, psychological health, and social responsibilities.

In the university student population, smartphone addiction typically manifests in the form of prolonged engagement with social networking sites, online gaming, streaming, and endless browsing. This compulsive usage not only disrupts academic focus and sleep patterns, but also leads to procrastination, emotional dysregulation, and deterioration of interpersonal relationships. Over time, students may experience a progressive loss of control over usage patterns, persisting despite awareness of its negative impact on academic performance, physical health, and psychological well-being[15].

Importantly, smartphone addiction goes beyond mere usage frequency; it reflects a deep psychological dependence and emotional attachment to the device. Affected individuals often exhibit nomophobia (i.e., anxiety when without access to their phones), an urgent need to check notifications, and cognitive preoccupation with smartphone-related activities. These symptoms mirror the six components of behavioral addiction proposed in Griffiths' model-salience, mood modification, tolerance, withdrawal, conflict, and relapse-which have been widely validated across digital behavioral addictions [16]. This framework provides a comprehensive lens to examine the motivational and emotional cycles that sustain addictive smartphone use.

4.1.2. Dimensions and Measurement of Smartphone Addiction

In the context of Chinese university students, the Smartphone Addiction Scale – Short Version (SAS-SV) is widely used due to its robust psychometric properties. This scale typically measures six dimensions: (1) daily-life disturbance, (2) withdrawal, (3) overuse, (4) tolerance, (5) cyberspace-oriented relationships, and (6) positive anticipation. Each item is rated on a Likert scale.

4.2. Social Anxiety

4.2.1. Theoretical Foundation of Social Anxiety

Social anxiety is defined as a persistent and excessive fear of being negatively evaluated, embarrassed, or humiliated in social or performance situations, which leads to avoidance behaviors and significant psychological distress (American Psychiatric Association, 2013). Traditionally, it encompasses face-to-face interactions in academic, interpersonal, or professional settings. However, with the advent of pervasive digital communication, particularly among university students, this construct has evolved into what is now termed "social media-induced social anxiety," reflecting anxiety symptoms specifically triggered by online interactions, such as the fear of being ignored, criticized, or misinterpreted on social networking platforms [17].

Among university students, who are developmentally sensitive to peer acceptance and identity formation, social anxiety is often magnified by the pressures of impression management and

upward social comparison in digital environments. These students are constantly exposed to curated content from their peers, which fosters unrealistic expectations and induces chronic self-monitoring. The Cognitive Model of Social Anxiety [18] explains that socially anxious individuals tend to exhibit cognitive distortions such as hypervigilance to perceived threats, exaggerated fear of negative evaluation, and heightened self-consciousness during social interactions. These cognitive biases not only apply to real-world settings but are intensified in online interactions where feedback mechanisms (e.g., likes, comments, shares) are immediate, public, and quantifiable [19]. The convergence of theoretical framework highlights the dual-channel nature of social anxiety in modern contexts-operating across both physical and digital social environments.

4.2.2. Measurement of Social Anxiety

To capture the nuances of social anxiety in the digital era, this study employs the Social Anxiety Scale for Social Media Users (SAS-SMU), a multidimensional instrument specifically designed to assess social anxiety symptoms arising from online social behaviors. This scale has been validated among Chinese university populations and encompasses four key dimensions: (1) content concern-worrying about the appropriateness or reception of posted content; (2) peer evaluation concern-fear of being judged by others for one's online presence; (3) public exposure fear-discomfort stemming from the visibility of one's digital actions to a broad audience; and (4) approval dependence-an emotional reliance on positive feedback for self-worth [20]. Each item is rated on a Likert-type scale.

The SAS-SMU is particularly suited for evaluating social anxiety in the mobile-internet context because it integrates both trait-like characteristics of anxiety (e.g., persistent cognitive worry) and state-like features (e.g., anxiety during specific online activities).

4.2.3. Social Anxiety as a Mediator

In the proposed conceptual framework, social anxiety plays a mediating role between smartphone addiction and mental well-being. Previous empirical studies suggest that excessive and compulsive use of smartphones-especially for social purposes-exposes users to higher risks of interpersonal rejection, negative feedback, and online conflict, all of which heighten social anxiety symptoms [21]. As individuals become more dependent on digital interactions to maintain social connections, they simultaneously become more sensitive to perceived judgment and less capable of handling ambiguity in virtual communication, creating a feedback loop of increased vigilance and anxiety.

This anxiety, once internalized, significantly impairs emotional regulation, reduces self-efficacy, and diminishes one's capacity to engage in authentic social interactions. Over time, elevated social anxiety undermines key components of mental well-being, such as optimism, social connectedness. From a psychological mechanism perspective, the mediating role of social anxiety reflects a "cognitive-emotional cascade". This chain of influence highlights the need to treat social anxiety not merely as a symptom but as a pivotal psychological construct that bridges digital behavior and mental health.

4.3. Mental Well-Being

4.3.1. Connotation of Mental Well-Being

Mental well-being refers to a positive, stable, and sustainable psychological state that encompasses emotional balance, cognitive clarity, life satisfaction, self-actualization, and the ability to cope effectively with everyday stressors [22]. It represents not just the absence of psychopathology, but more importantly, the presence of psychological strengths, such as self-efficacy, optimism, autonomy, and meaningful social relationships.

Unlike traditional deficit-based models of mental health that focus solely on the reduction of symptoms or distress, the construct of mental well-being stems from the positive psychology

paradigm. This paradigm emphasizes the development of individual strengths, flourishing, and human potential [23]. The dual-factor model of mental health posits that individuals may simultaneously exhibit low levels of psychological distress and low levels of mental well-being, indicating that enhancing mental well-being is a distinct and necessary goal in education and psychological intervention [24]. Consequently, mental well-being is now regarded as a core developmental indicator for young adults in higher education.

4.3.2. Measurement of Mental Well-Being

To assess mental well-being among university students, this study utilizes the Warwick-Edinburgh Mental Well-being Scale (WEMWBS), developed by Stewart-Brown et al. [25]. The scale includes 14 positively worded items that reflect aspects of both emotional and psychological functioning, such as "I've been feeling optimistic about the future" and "I've been thinking clearly." WEMWBS is grounded in a unidimensional structure, which allows for a concise yet holistic measure of mental well-being.

4.4. Relationships and Pathways Among the Three Core Variables

4.4.1. Hypothesized Relationships Between Variables

Based on theoretical foundations, this study proposes the following mediated pathway model: Smartphone Addiction → Social Anxiety → Mental Well-Being

This model not only helps uncover the psychological mechanism behind impaired mental health among university students but also offers theoretical insights for future intervention strategies. By identifying the mediating role of social anxiety, the model clarifies how smartphone addiction indirectly influences psychological outcomes, thus enabling more targeted support systems for student well-being.

4.4.2. Mechanisms and Mediating Pathways

At the micro-psychological level, smartphone addiction activates real-time social feedback mechanisms that enhance individuals' concerns about being evaluated by others. Features such as "likes," "comments," and "views" reinforce self-monitoring behavior and the anticipation of social scrutiny, which contribute to a heightened state of social anxiety [26]. Over time, this increased vigilance toward peer evaluation induces a cognitive-behavioral cycle of self-doubt, fear of rejection, and avoidance of social interactions-both online and offline.

Social anxiety, as a persistent negative emotional experience. It reduces their confidence in initiating social contact, diminishes emotional resilience, and impairs their sense of self-worth and life purpose. Prolonged exposure to such anxiety is associated with emotional exhaustion, increased loneliness, and lower life satisfaction, which are all critical indicators of diminished mental well-being [27].

In summary, this hypothesized mediating process not only delineates the psychological pathway connecting behavioral addiction and mental health but also provides a novel perspective for understanding the vulnerability of university students in the mobile internet era. Effective psychological interventions and educational strategies should focus on reducing social anxiety, reshaping students' cognitive responses to smartphone use, and strengthening emotional resilience, thereby improving overall mental well-being.

5. Educational Intervention Strategies

In light of the findings indicating that smartphone addiction negatively impacts mental well-being through the mediating role of social anxiety, it is imperative to propose targeted educational interventions.

5.1. Establishing a Digital Behavior Education Framework in Higher Education

Universities should integrate digital literacy and behavior regulation into the core curriculum, fostering students' awareness of responsible technology use. Educational initiatives such as specialized lectures on smartphone addiction, campus-wide "phone-free classroom" campaigns, and interactive workshops on digital self-control can cultivate students' metacognitive capacity to recognize and manage compulsive phone usage. Moreover, incorporating interdisciplinary knowledge from psychology, neuroscience, and media studies can help students understand the cognitive mechanisms underlying digital dependency, thereby enhancing their capacity for self-regulation and digital citizenship.

5.2. Developing Mechanisms for Early Detection and Intervention of Social Anxiety

Given the role of social anxiety as a psychological mediator, university mental health services should implement comprehensive screening protocols targeting symptoms related to digital-era anxiety—such as social withdrawal, fear of judgment on social media, and self-presentation concerns. Regular psychological assessments can include questions specifically designed to detect internet-related social apprehension. Based on the screening results, tailored group counseling sessions, psychoeducational programs, and app-based cognitive-behavioral therapy (CBT) interventions can be offered to reduce social avoidance and improve interpersonal functioning.

5.3. Promoting Positive Psychology and Psychological Resilience

To improve students' overall mental well-being, universities should strengthen the delivery of positive psychology education. This can take the form of elective courses on psychological well-being, life education seminars, gratitude journaling programs, and resilience training camps. These interventions aim to foster emotional flexibility, self-acceptance, and a sense of meaning in life-factors known to buffer the negative effects of stress and anxiety. Encouraging students to express positive emotions and build strengths-based coping mechanisms can significantly enhance their psychological capital.

6. Conclusion

6.1. Summary and Interpretation of Findings

This study explored the impact of smartphone addiction on university students' mental well-being, with social anxiety serving as a mediating variable. The results supported a significant negative association between smartphone addiction and mental well-being. Excessive and compulsive smartphone use was found to impair students' psychological states by increasing fatigue, diminishing social connectedness, and reducing engagement in meaningful offline activities. University students who are addicted to smartphones often report higher sensitivity to social feedback, fear of negative evaluation, and a tendency to withdraw from face-to-face communication. These symptoms of social anxiety are known to compromise self-worth and disrupt affective balance, leading to lower levels of mental well-being. Therefore, social anxiety functions as a psychological mechanism through which problematic smartphone use undermines emotional and psychological health.

6.2. Theoretical and Practical Implications

From a theoretical perspective, this study extends the literature on behavioral addiction and digital mental health by integrating smartphone addiction, social anxiety, and mental well-being into a coherent mediating framework. The findings provide empirical validation for the Stress Process Model and Cognitive-Behavioral Theory of social anxiety in digital contexts. Notably, this research highlights how smartphone-induced stressors (e.g., social comparison,

impression management) may exacerbate pre-existing vulnerabilities, thereby impairing adaptive functioning and mental health.

Practically, the study offers valuable insights for campus mental health interventions. First, universities should recognize the psychological consequences of excessive smartphone use and incorporate digital behavior education into their curriculum. Digital literacy programs should not only address time management, but also emphasize emotional awareness and regulation strategies. Second, counseling services need to strengthen their screening and support systems for students with social anxiety symptoms-particularly those related to online interactions. Group therapy or social skills training tailored to the mobile internet environment may help reduce avoidance behaviors and restore interpersonal confidence. Finally, the promotion of positive mental health should focus on building students' psychological resilience through well-being workshops, peer support networks, and emotional regulation training rooted in positive psychology.

6.3. Limitations and Future Research Directions

Despite its contributions, this study has several limitations. First, the use of self-report questionnaires may introduce response bias or social desirability effects. Future research should consider multi-method approaches, including behavioral tracking, peer reports, or physiological measures to enhance reliability. Second, the sample was limited to Chinese university students, which may affect the generalizability of the findings to other age groups or cultural settings. Future studies should also explore potential moderators such as gender, digital literacy, personality traits (e.g., neuroticism or extraversion), and resilience. Moreover, intervention studies examining the efficacy of mindfulness, cognitive-behavioral therapy, or digital detox programs in reducing smartphone addiction and improving mental well-being are warranted. Understanding how to effectively disrupt the addiction-anxiety-distress cycle will be crucial for promoting healthier digital habits and psychological flourishing among young adults.

Acknowledgments

2024 Guangdong Education Science Planning Project (Higher Education Special Project) "Study on the Impact of Smartphone Addiction on College Students' Positive Mental Health: Testing a PLS Model Based on Moderated Mediation" (2024GXJK1057); 2025 Maoming Philosophy and Social Sciences Planning Co-construction Project "The Influence Mechanism of Mental Well-being among University Students in Maoming: A Mediation Model Test Based on Structural Equation Modeling" (2025GJ28); 2024 Ministry of Education Humanities and Social Sciences Research Special Project (University Counselor Research) "Smartphone Addiction and Positive Mental Health Among College Students: Mediating Mechanism of Psychological Resilience in Regulating Social Anxiety" (24JDSZ3056); 2025 National Mental Health and Mental Health Prevention Center/China Education Development Foundation/Ministry of Education Student Services and Quality Development Center "Sunflower Student Mental Health Promotion Initiative" Support Project "Mechanisms of College Students' Smartphone Addiction on Life Satisfaction: A Model Test Based on Mediating Effects" (GX25A002).

References

- [1] N. Zhang, "Mechanisms of Smartphone Addiction in University Students and Intervention Methods," *Lecture Notes in Education Psychology and Public Media*, 2024. [Online]. Available: https://consensus.app/papers/mechanisms-of-smartphone-addiction-in-university-zhang/34eacc13940d5b3389eebca2722c742b/?utm_source=chatgpt

- [2] N. A. F. M. Amin, T. N. N. T. Ismail, K. Ponnuraj, and W. N. S. Shahidan, "Psychosocial Impact of Smartphone Addiction among University Student: A Review," *JANUARY 2024*, 2024. [Online]. Available: https://consensus.app/papers/psychosocial-impact-of-smartphone-addiction-among-amin-ismail/9f4e14105c9d588c8c7ad2faf05d36b7/?utm_source=chatgpt
- [3] G. Dou and B. Feng, "Social anxiety and smartphone addiction among college students: the mediating role of depressive symptoms," *Current Psychology*, 2025. [Online]. Available: https://consensus.app/papers/social-anxiety-and-smartphone-addiction-among-college-dou-feng/3c5ba62edc56506bb5a9b94b7a609d47/?utm_source=chatgpt
- [4] A. E. Darcin, C. Noyan, S. Nurmedov, O. Yilmaz, and N. Dilbaz, "Smartphone Addiction in Relation with Social Anxiety and Loneliness Among University Students in Turkey," *European Psychiatry*, vol. 30, p. 1, 2015. [Online]. Available: https://consensus.app/papers/smartphone-addiction-in-relation-with-social-anxiety-and-darcin-noyan/44b995d304bd50ca93b8c76f8178358e/?utm_source=chatgpt
- [5] N. O. Elamin, J. M. Almasaad, R. B. Busaeed, D. A. Aljafari, and M. A. Khan, "Smartphone addiction, stress, and depression among university students," *Clin. Epidemiol. Glob. Health*, 2023. [Online]. Available: https://consensus.app/papers/smartphone-addiction-stress-and-depression-among-elamin-almasaad/b61f8edd603e5cae9fe46c555163f298/?utm_source=chatgpt
- [6] L. Squires, K. B. Hollett, J. Hesson, and N. Harris, "Psychological Distress, Emotion Dysregulation, and Coping Behaviour: a Theoretical Perspective of Problematic Smartphone Use," *Int. J. Ment. Health Addiction*, vol. 19, pp. 1284–1299, 2020. [Online]. Available: https://consensus.app/papers/psychological-distress-emotion-dysregulation-and-coping-squires-hollett/bb59577cb4155fa4a5a66fca972b606b/?utm_source=chatgpt
- [7] W. Ning, F. D. Davis, and R. Taraban, "Smartphone Addiction and Cognitive Performance of College Students," 2018. [Online]. Available: https://consensus.app/papers/smartphone-addiction-and-cognitive-performance-of-ning-davis/153ffd54b53f545583384dd865190f30/?utm_source=chatgpt
- [8] Ş. Gligor and I. Mozoş, "Indicators of smartphone addiction and stress score in university students," *Wien. Klin. Wochenschr.*, vol. 131, pp. 120–125, 2018. [Online]. Available: https://consensus.app/papers/indicators-of-smartphone-addiction-and-stress-score-in-gligor-mozos/a7d7076fa0c05a7383fb6b91e9cd2019/?utm_source=chatgpt
- [9] B. R. Schlenker and M. Leary, "Social anxiety and self-presentation: a conceptualization and model," *Psychological Bulletin*, vol. 92, no. 3, pp. 641–669, 1982, doi: 10.1037/0033-2909.92.3.641.
- [10] J. Skogen, G. J. Hjetland, T. Bøe, R. T. Hella, and A. Knudsen, "Through the Looking Glass of Social Media. Focus on Self-Presentation and Association with Mental Health and Quality of Life," *International Journal of Environmental Research and Public Health*, vol. 18, 2020, doi: 10.3390/ijerph18063319.
- [11] E. Abdelraouf and H. Amin, "Virtual Facades: Exploring the Relationship Between Self-Presentation on Facebook and Social Anxiety Among Egyptian Generation Z Users," *Journal of Arab & Muslim Media Research*, 2024, doi: 10.1386/jammr_00079_1.
- [12] G. Tsitsas, P. Nanopoulos, and A. Paschali, "Life Satisfaction, and Anxiety Levels among University Students," *Creative Education*, vol. 10, no. 5, pp. 947–963, 2019. [Online]. Available: https://consensus.app/papers/life-satisfaction-and-anxiety-levels-among-university-tsitsas-nanopoulos/7103043171be58c4b4c05f9392099a4c/?utm_source=chatgpt
- [13] S. Leow, K. Leow, and C. L. C. Ean, "Satisfaction of basic psychological needs and eudaimonic well-being among first-year university students," *Cogent Social Sciences*, vol. 9, 2023. [Online]. Available: https://consensus.app/papers/satisfaction-of-basic-psychological-needs-and-eudaimonic-leow-leow/68b0a4a8f72356e5b9c2a6f4da94a7b3/?utm_source=chatgpt
- [14] H. Zaman, Z. Bibi, and A. Arshad, "Social Interaction Anxiety as Mediating Role of Mental Well-being and Quality of Life Among University Students," *Global Social Sciences Review*, vol. 9, no. 3, 2024. [Online]. Available: https://consensus.app/papers/social-interaction-anxiety-as-mediating-role-of-mental-zaman-bibi/d7be78f44b3f53f7972eee017aeeaf35/?utm_source=chatgpt

- [15] E. Lazarus, "Prevalence of nomophobia among University students in Oman," *Journal of Nursing and Health*, vol. 5, 2020. [Online]. Available: https://consensus.app/papers/prevalence-of-nomophobia-among-university-students-in-lazarus/d0d1bd2dc3c354ec99cc0a6daf2bff80/?utm_source=chatgpt
- [16] R. Ranjan, P. S. Y. Balhara, B. Mishra, S. Sarkar, and S. Nath, "Nomophobia (Fear of being without one's smartphone): Emerging realm of gadget addiction," *Indian Journal of Psychiatry*, vol. 64, p. S621, 2022. [Online]. Available: https://consensus.app/papers/symposium-title-nomophobia-fear-of-being-without-owns-ranjan-balhara/beaa86666f405fe28c42be253d653299/?utm_source=chatgpt
- [17] F. A. Alfasi, "The role of social comparison and rumination in predicting social anxiety through Facebook: A cross-cultural study," *Current Psychology*, vol. 41, pp. 2458–2466, 2022. [Online]. Available: https://consensus.app/papers/role-of-social-comparison-and-rumination-in-predicting-alfasi/4a2a9427be6b51099835c20d0ffb3740/?utm_source=chatgpt
- [18] H. Zaman, Z. Bibi, and A. Arshad, "Social Interaction Anxiety as Mediating Role of Mental Well-being and Quality of Life Among University Students," *Global Social Sciences Review*, vol. 9, no. 3, 2024. [Online]. Available: https://consensus.app/papers/social-interaction-anxiety-as-mediating-role-of-mental-zaman-bibi/d7be78f44b3f53f7972eee017aeef35/?utm_source=chatgpt
- [19] I. Polletta, "Regulating Self-Image on Social Media: Associations Between Social Anxiety and Instagram Control Behaviors," 2020. [Online]. Available: https://consensus.app/papers/regulating-selfimage-on-social-media-associations-polletta/9b7e852207ca5f269dec85bf1d5aa3ae/?utm_source=chatgpt
- [20] G. Jia, H. Dai, Y. Chu, X. Wang, Y. Hao, and S.-d. Wang, "Psychometric evaluation of the Chinese version of social anxiety scale for social media users and cross-sectional investigation into this disorder among college students," *Comprehensive Psychiatry*, vol. 116, p. 152328, 2022. [Online]. Available: https://consensus.app/papers/psychometric-evaluation-of-the-chinese-version-of-social-jia-dai/c624c9df633c551982a37abefa199de5/?utm_source=chatgpt
- [21] F. A. Alfasi, "The role of social comparison and rumination in predicting social anxiety through Facebook: A cross-cultural study," *Current Psychology*, vol. 41, pp. 2458–2466, 2022. [Online]. Available: https://consensus.app/papers/role-of-social-comparison-and-rumination-in-predicting-alfasi/4a2a9427be6b51099835c20d0ffb3740/?utm_source=chatgpt
- [22] G. Tsitsas, P. Nanopoulos, and A. Paschali, "Life Satisfaction, and Anxiety Levels among University Students," *Creative Education*, vol. 10, no. 5, pp. 947–963, 2019. [Online]. Available: https://consensus.app/papers/life-satisfaction-and-anxiety-levels-among-university-tsitsas-nanopoulos/7103043171be58c4b4c05f9392099a4c/?utm_source=chatgpt
- [23] S. Leow, K. Leow, and C. L. C. Ean, "Satisfaction of basic psychological needs and eudaimonic well-being among first-year university students," *Cogent Social Sciences*, vol. 9, 2023. [Online]. Available: https://consensus.app/papers/satisfaction-of-basic-psychological-needs-and-eudaimonic-leow-leow/68b0a4a8f72356e5b9c2a6f4da94a7b3/?utm_source=chatgpt
- [24] H. Zaman, Z. Bibi, and A. Arshad, "Social Interaction Anxiety as Mediating Role of Mental Well-being and Quality of Life Among University Students," *Global Social Sciences Review*, vol. 9, no. 3, 2024. [Online]. Available: https://consensus.app/papers/social-interaction-anxiety-as-mediating-role-of-mental-zaman-bibi/d7be78f44b3f53f7972eee017aeef35/?utm_source=chatgpt
- [25] S. Stewart-Brown, S. Platt, A. Tennant, H. Maheswaran, J. Parkinson, S. Weich, R. Tennant, F. Taggart, and A. Clarke, "The Warwick–Edinburgh Mental Well-being Scale (WEMWBS): a valid and reliable tool for measuring mental well-being in diverse populations and projects," *J. Epidemiol. Community Health*, vol. 65, pp. A38–A39, 2011. [Online]. Available: https://consensus.app/papers/the-warwickedinburgh-mental-wellbeing-scale-wemwbs-a-stewart-brown-platt/d6d0712a0c6f5665aac9d7f931d19921/?utm_source=chatgpt
- [26] A. M. Volungis, M. Kalpidou, C. Popores, and M. Joyce, "Smartphone Addiction and Its Relationship with Indices of Social-Emotional Distress and Personality," *Int. J. Ment. Health Addiction*, vol. 18, pp. 1209–1225, 2019, doi: 10.1007/s11469-019-00119-9.

- [27] Y. Kalinkara and T. Talan, "Psychological Balances in the Digital World: Dynamic Relationships Among Social Media Addiction, Depression, Anxiety, Academic Self-Efficacy, General Belongingness, and Life Satisfaction," *J. Genet. Psychol.*, pp. 1–29, 2024, doi: 10.1080/00221325.2024.2400342.