



ΣΧΟΛΗ ΨΥΧΟΛΟΓΙΑΣ

**THE RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION,
RESILIENCE AND MENTAL HEALTH RISK**

Του

Παντελής Δαμιανού

**ΠΡΟΓΡΑΜΜΑ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ ΣΤΗ
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Υποβληθέντας στη Σχολή Ψυχολογίας σε μερική εκπλήρωση
των απαιτήσεων για την απόκτηση του Πτυχίου του Προγράμματος Μεταπτυχιακών σπουδών στην
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The Relationship between Social Media addiction, Resilience and Mental Health risk

Διπλωματική Εργασία

Επιβλέπουσα Καθηγήτρια

Δρ. Λουκία Ταζιτάρη

Ονόματα Μελών Εξεταστικής Επιτροπής:

Γιώργος Τσίτσας

Μαριλένα Μουσουλίδου

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Ονοματεπώνυμο Κοσμήτορα:

Στέλιος Ν. Γεωργίου

Chapter 1: Literature Review

1.1 Introduction

The introduction of social media into everyday life has created a new type of addiction for many people. Social media addiction is now discussed much more seriously, as its impact on daily functioning is becoming clearer. In particular, the use of platforms such as Instagram has been linked to addictive patterns and, in some cases, features associated with narcissistic personality traits (Casale & Banchi, 2020). Addiction in general has been an issue in Western societies for years and continues to be a major concern. People now face different forms of addiction, ranging from substance abuse and gambling to sexual addiction, and more recently, social media addiction. With social media being part of people's routines, its addictive qualities have become more noticeable. Instagram is one of the most frequently used platforms, along with Facebook, Twitter, and TikTok. Social media is especially common among individuals aged 18–30, who use these platforms mostly to share photos and videos, message, and engage with likes and followers. Because of this widespread use, it is important to examine what factors may increase the likelihood of developing addictive patterns of social media use. The main focus of this topic is to understand how social media addiction may relate to resilience, borderline personality disorder traits, and anxiety.

Borderline Personality Disorder is a psychological personality disorder, as described by Trull, Distel, and Carpenter (2011), that involves symptoms and difficulties such as impulsive behaviour without considering consequences, intense anger or outbursts, fear of abandonment, possible self-harm episodes, emotional instability, feelings of emptiness, disturbances in identity, difficult relationships and sometimes suicide risk. Social media has changed the way people communicate and connect, even more so for people who are diagnosed with BPD.

According to Andreassen, Pallesen, and Griffiths (2017), social media has become a common leisure activity, which is evident in Cyprus as well. Although most people do not overuse it, some individuals do show problematic and addictive patterns. Their study explored how narcissism, addictive use of social media, and self-esteem might be related. What they found was that younger females, under certain conditions, showed more addictive use. The authors suggested this might reflect attempts to boost self-image or reduce negative thoughts, which makes sense with narcissistic personality disorder. In addition, factors such as low education, low income, low self-esteem, and narcissistic traits seemed to increase this risk. Since the study was carried out in Norway, cultural factors should also be considered; if a similar study were carried out in Cyprus, the results might differ slightly. Similarly, Casale and Banchi (2020) reviewed several studies and found that narcissism was often positively associated with problematic and addictive social media use. According to Liebke et al. (2017), individuals diagnosed with BPD often describe persistent and deep loneliness, which is sometimes linked to social isolation. This loneliness could push them toward heavier and more addictive use of social media as a way to feel connected. In another related study, Longshore (2021) examined how people with BPD use social media and found that addictive use actually has a chance to increase their difficulties in forming or maintaining offline relationships. Most participants in that sample were women, so we don't have a clear image

of men, and they reported increased self-isolation, which may contribute to difficulties forming offline relationships due to bias. Other psychological factors, such as social anxiety, loneliness, happiness, depressive symptoms, and anxiety, seem to influence usage and increase/ decrease based on social media usage. Firstly, social anxiety and loneliness have been shown to predict and increase problematic social media use, while happiness tends to predict lower usage (Baltaci, 2019). It is worth noting that social anxiety and loneliness tend to predict and increase dysfunctional patterns. According to Keles, McCrae, and Grealish (2020), problematic social media use has also been linked with increases in depression, anxiety, and psychological distress among adolescents and younger adults. From a psychological standpoint, this would make sense, as low self-esteem, the ideal self, and self-image are all negatively influenced by social media use. Overall, addictive social media use appears to affect mental health, especially anxiety levels strongly, but mental health also appears to predict addictive social media use.

In this study, the aim is to see whether borderline personality traits, anxiety, and low resilience contribute to social media addiction, in order to better understand the behavioural patterns associated with problematic use and pathways to addiction.

1.2 Literature Review

Addiction is described as a constant pattern or behaviour that interferes negatively with everyday life, characterised by impaired control and cravings (West, R., & Brown, J., 2013). Similarly, social media addiction is described as an excessive or compulsive constant pattern of using social networking platforms that starts to interfere with everyday life, damaging relationships, not following through with work responsibilities, or negatively influencing emotional well-being (Andreassen, 2015). Although the term social media addiction is used

frequently in both public and academic conversations, it is important to distinguish between high or frequent engagement or use of social media, and genuinely dysfunctional, problematic and addictive use. Frequent use may be classified as high engagement and does not necessarily lead to functional impairment, while problematic, dysfunctional or addictive use, on the other hand, is characterised by loss of control, negative consequences across daily functioning, psychological dependence, emotional distress, and impaired academic or work performance (Andreassen, 2015; Kuss & Griffiths, 2017). Although it is not yet officially recognised as a diagnosable mental disorder, many of its features resemble those found in other behavioural addictions. According to Griffiths (2005), six core components of behavioural addiction were described: salience, mood modification, tolerance, withdrawal, conflict, and relapse. These same patterns can often be seen in addictive social media use. This makes it easier to understand why some people struggle to reduce or control their time online, and is one of the reasons most platforms introduce parental controls for adolescents, aimed at controlling screen time. Additionally, if we take into account problematic use in the first place as being caused by psychological difficulties, this makes perfect sense. Young adults appear to be more vulnerable to these difficulties, mainly because they tend to use social media more frequently and for longer periods, at a time when they are unsure of themselves, still developing, and maybe seeking reassurance or acceptance through social media. Research has shown that individuals aged 18–30 are more likely to develop problematic or addictive forms of use (Kuss & Griffiths, 2017). Still, we could argue that adolescents may fall in the same category. This could be caused by developmental factors, lifestyle habits, loneliness, low self-esteem, isolation, and the importance placed on online identity and social interactions at this age. The instant feedback that platforms provide through likes, comments, or follower counts may also reinforce the urge to keep checking or

posting while also feeding narcissistic traits in NPD, producing feelings of bliss and happiness because “they like me “.

Resilience refers to a person’s ability to recover or “bounce back” from stressful or challenging situations, and those with higher resilience generally cope more effectively (Smith et al., 2008). People with lower resilience may turn to dysfunctional patterns, self-destructive behaviour and social media more often as a way of escaping negative emotions or avoiding stress, which increases the risk of developing addictive patterns as it teaches the behavioural cue that social media use soothes anxiety. Some recent findings suggest that resilience is negatively associated with any addiction, but also social media addiction, and acts as a protective factor (Žmavc et al., 2022). People with normal or higher resilience tend to have developed skills in better emotional regulation, which can help them avoid compulsively relying on social media or recognising the problematic pattern that may form, so they can disrupt it before it even starts. Resilience also seems to reduce the effects of psychological difficulties. This makes sense as high resilience promotes skills and thoughts that promote healing, not spiralling. Studies have shown that resilience can reduce the negative impact of anxiety, depression, and stress on daily functioning (Hu et al., 2015). As a result, individuals with higher resilience may be less affected by negative experiences or events such as social comparison, cyberbullying, or fear of missing out, all of which are common stressors linked with social media use; they may also resist the urge to “join the trend”. It is also worth noting that older adults tend to have greater resilience than younger adults (Gooding, P. A., Hurst, A., Johnson, J., & Tarrier, N., 2012).

Additionally, another important factor that has been increasingly discussed in the literature is the role of emotional regulation difficulties in the development of dysfunctional social media use. Emotional regulation is the ability to manage, understand, and respond to emotional

experiences adaptively. Individuals who experience difficulties with emotional regulation may rely more heavily on external behaviours, such as excessive social media use, in order to reduce negative emotional states and psychological distress (Gross, 1998; Brand et al., 2016). Research suggests that individuals who struggle with regulating emotions are more likely to use online environments as a way to escape negative affect or seek reassurance, which may increase vulnerability to problematic or addictive social media use (Marino et al., 2018; Kuss & Griffiths, 2017). Specifically, previous research has shown that maladaptive coping strategies, such as avoidance coping and emotional suppression, are heavily associated with dysfunctional online behaviours and behavioural addictions (Brand et al., 2016; Kuss & Griffiths, 2017). This is convenient, as social media platforms appear to provide immediate distraction, reassurance, and emotional validation, thereby reducing emotional discomfort in the short term. This emotional relief may lead to a pattern and increase dependence on social media as a coping strategy. When taking into account individuals with high anxiety levels or borderline personality indications, this becomes particularly relevant, as they often experience an increased sensitivity to stress and uncertainty, and this can directly lead them to seek reassurance through online interactions (Vannucci et al., 2017). Due to BPD traits being strongly associated with emotional instability and low tolerance to distress, this may act as another factor increasing the likelihood of social media being used for emotional regulation and leading to dysfunctional use (Liebke et al., 2017). As for resilience, it appears to function differently within the framework; individuals with higher resilience appear to demonstrate more adaptive emotional regulation techniques and skills that promote better stress management (Smith et al., 2008; Hu et al., 2015;). This can significantly reduce the need to rely on social media use for emotional regulation, and can be used to explain the negative association between resilience and social media addiction found in several studies.

Additionally, the reinforcement and reward theories can be used to explain excessive or addictive social media use. Social media platforms have been designed around reward mechanisms that include comments, likes, shares, and follower counts. Features such as these can act as intermittent reinforcement, which is considered the strongest reinforcement schedule in behavioural psychology (Ferster & Skinner, 1957; Griffiths, 2005; Montag et al., 2019). Previous research strongly suggests that unpredictable reward patterns tend to increase compulsive behaviour, as individuals continue the pattern in anticipation of positive feedback or rewards (Griffiths, 2005; Ferster & Skinner, 1957; Clark et al., 2009). This can be compared to reinforcement mechanisms observed in other behavioural addictive behaviours, such as gambling (Griffiths, 2005; Potenza, 2006). Specifically, individuals who appear emotionally vulnerable can be reinforced from this reward structure, for example individuals with reported low self-esteem, high anxiety may become dependent and highly sensitive to online validation, as receiving positive feedback online may for a short time period improve mood and self-view, therefore reinforcing dysfunctional social media use (Andreassen, 2015; Vogel et al., 2014; Montag et al., 2019). This newly built reinforcement cycle may be particularly strong for young adults, as suggested by neurological research indicating that reward systems during early adulthood are more sensitive to social feedback and novelty (Foulkes & Blakemore, 2018; Clark et al., 2009).

Furthermore, recent literature has increasingly supported the idea that social media addiction is developed through the interaction of multiple psychological difficulties or vulnerabilities rather than a single factor. Specifically, it was suggested that anxiety, emotional instability, low resilience, interpersonal sensitivity and difficulties related to identity may interact to increase the probability of dysfunctional social media use (Kircaburun & Griffiths, 2018; Marino et al., 2018; Brand et al., 2019). This identified multi-factor vulnerability approach seems to align with both Griffiths' Components Model and the I-PACE model (Griffiths,

2005; Brand et al., 2019). Instead of viewing addiction as a simple behavioural habit, it is suggested by these models that the development of addictive behaviours occurs when psychologically vulnerable individuals use specific behaviours repeatedly to regulate emotional distress (Griffiths, 2005; Brand et al., 2016). To better understand this, individuals with borderline personality traits may experience particularly strong emotional reactions and distress which may increase their reliance on social media for reassurance or connection (Liebke et al., 2017; Longshore, 2021), and as another example individuals with high anxiety may use social media as avoidance for social stress (Vannucci et al., 2017; Keles et al., 2020). Lastly, individuals with low resilience may not have developed or lack adaptive coping strategies, and as a result, they become more likely to rely on external emotional regulation methods that may develop into addictive patterns (Hu et al., 2015). This interaction may help understand why some individuals develop addiction. Some others do not, even when using social media excessively, underscoring the importance of examining multiple psychological factors (Brand et al., 2019).

Anxiety is considered one of the strongest predictors of self-destructive behaviours and problematic social media use due to people using these methods as an escape or to soothe their anxiety, which produces the results of an addictive and negative pattern. People who experience higher levels of anxiety could turn to social media either to feel connected or to distract themselves from uncomfortable emotions (Vannucci, Flannery, & Ohannessian, 2017), thus avoiding the emotion instead of dealing with it. If this is done consistently, it can lead to repetition and can become even compulsive. Similar to all avoidant actions, social media tends to intensify anxiety rather than reduce it, since the emotion is not dealt with, merely tucked away. Additionally, constant notifications, social comparison, or the fear of missing out could be factors inducing even more anxiety. When someone begins relying on

social media to manage or regulate their emotions, and this becomes a learned behaviour, it leads to addiction and increases the difficulty of limiting or reducing usage significantly.

A similar pattern appears in people with borderline personality traits. Individuals with BPD features often struggle with emotional regulation, on-and-off relationships, fear of abandonment, and an unstable sense of self. Because of this, they may seek reassurance or validation through online interactions or conduct their on-and-off relationships online.

Additionally, they could form a new identity online that they strive to match in real life.

These behaviours, combined with ongoing anxiety and lower levels of resilience, and the fact that they may already be using self-destructive behaviours, can increase the likelihood of developing more addictive patterns of social media use. Overall, the research suggests that social media addiction is shaped by a combination of personality characteristics, emotional vulnerability and the coping strategies people rely on, which we can also say for most addictions. For this reason, the present study focuses on the relationship between borderline personality traits, anxiety, resilience and social media addiction in young adults. In addition to fear of abandonment and emotional instability, attachment theory may provide further information on why individuals with traits associated with Borderline personality appear increasingly vulnerable to dysfunctional social media use. Insecure attachments and specifically anxious attachment are described by heightened sensitivity to rejection and a strong need for reassurance and intense fear of interpersonal loss (Mikulincer & Shaver, 2010; Staebler et al., 2011). Individuals with borderline personality traits often display attachment-related insecurities, and this can lead them to seek reassurance and validation online (Trull et al., 2011). Famous social media platforms offer constant opportunities for behaviours seeking reassurance, monitoring others and feedback about beauty; all this may temporarily reduce attachment-caused anxiety, and this may also lead to a reinforcing cycle in which individuals engage repeatedly and excessively with social media to regulate fears of

abandonment and rejection (Brand et al., 2016; Griffiths, 2005). Previous research has shown that attachment anxiety is positively associated with dysfunctional or problematic social media use, specifically when individuals use online interactions and environments to compensate or reach unmet relational needs (Blackwell et al., 2017; Marino et al., 2018). Attachment-related vulnerabilities may work as an underlying mechanism that links borderline personality traits with social media addiction.

One of the main theories used to explain social media addiction is Griffiths' (2005) Components Model of Addiction. Griffiths suggested that all addictions, whether they involve substances or specific behaviours, share the same six components: salience, mood modification, tolerance, withdrawal, conflict and relapse, which, if we consider neurological factors, share the same pathways. The model was originally applied to gambling and other behavioural addictions; it has been widely used to understand excessive social media use as well, because the same patterns and pathways often appear in people who struggle to control their online behaviour. The first component is salience, which basically means that the behaviour becomes overly important in someone's life. This usually happens when a behaviour rewards us with a positive emotion. With social media addiction, this can be seen when someone starts thinking constantly about checking their phone, posting, or keeping up with notifications, worrying about not getting the number of likes they expect, or waiting for a message notification. The behaviour begins to take priority, reduces their focus and enjoyment of the moment, and can also distract them even when they are trying to focus on other things. The second component is mood modification. This refers to the emotional effects of the behaviour and the changes to negative emotions. Many people turn to social media to calm down, feel better, distract themselves or avoid negative emotions. For example, someone who feels anxious or lonely may scroll through social media to feel more connected or to avoid, or "forget" that feeling of anxiety. Over time, this can turn into a

coping mechanism, or learned behaviour, which links back to what we mentioned earlier about anxiety and low resilience. The third component is tolerance, meaning that a person needs more of the behaviour to achieve the same desired emotional effect. In the context of social media, someone may start by checking their accounts occasionally, posting once a week, but eventually feel the need to check far more often, sometimes every few minutes, and to post every few hours for the attention that is gained. This fits especially well for younger users who spend much of the day online. The fourth component is withdrawal, which refers to unpleasant feelings when the behaviour is not available; these unpleasant feelings can lead to compulsive behaviour, or even aggression. It can also look like irritability, restlessness, anxiety or even discomfort when someone has no access to their phone or internet. Some young adults report feeling “strange” or “disconnected” if they stay offline for too long, which may serve either as an excuse or a statement that proves addictive behaviour. The fifth component is conflict, which includes both external and internal conflict. External conflict may arise when excessive social media use leads to arguments with friends, partners, or family, often because the person is “always on their phone”, and this negatively affects their daily life by impairing their relationships. It can also interfere with work and university responsibilities by failing to meet deadlines and being constantly distracted. Internal conflict happens when someone knows their usage is excessive and feels guilty about it, yet still finds it difficult to stop, which creates guilt.

The final component is relapse, which refers to returning to old patterns even after trying to reduce or stop the behaviour. When we work with addictions, we expect relapse and work through it with compassion and without triggering more guilt, as this may spiral them back deeper. People might compulsively delete their apps or turn off notifications, only to reinstall them or return to heavy use shortly after. This is common because social media is easily accessible and integrated into most young adults’ daily routines.

Griffiths' model helps explain why some individuals become addicted to social media while others do not. It also fits well with the variables in this study as we try to check if addiction to social media is influenced by indications of borderline personality disorder, anxiety and low resilience. For instance, people with borderline personality traits or high anxiety may have stronger emotional reactions, making mood modification and tolerance more likely. At the same time, even if they have on-and-off relationships, this can also trigger salience. In addition, people with lower resilience might rely more on social media as a coping strategy, increasing the chances further of salience and conflict. In this way, the model supports the idea that specific psychological characteristics can increase vulnerability and the likelihood of developing addictive patterns of social media use. Overall, the Griffiths' Components Model offers a clear explanation of how social media addiction can develop and why it becomes such a persistent behaviour in young adults and possibly adolescents. The model was effective in describing internet addiction by linking addiction to personality and emotional vulnerability, and promotes the argument that behavioural addictions strongly resemble substance addictions (Kuss et al., 2014). Understanding these six components helps highlight the role of emotional difficulties, personality traits and coping abilities in maintaining and reinforcing problematic social media use.

Another theory that helps explain why some people develop addictive patterns of social media use is the I-PACE model by Brand and colleagues (2016, 2019, 2025). This model is used quite a lot in research on behavioural addictions. The name I-PACE stands for "Interaction of Person–Affect–Cognition–Execution", and the basic idea is that addictive behaviour develops through an ongoing interaction between a person's characteristics, their emotions, their thinking patterns, and the way they respond or act, which matches the structure of several techniques used in Cognitive Behavioural Therapy.

According to the model, some people are more vulnerable to problematic online behaviour because of certain personality traits or emotional difficulties that negatively predispose them to addictive patterns. For example, individuals who struggle with emotional instability, anxiety, or fear of abandonment and, as a result, latch on to relationships, may rely more heavily on social media to cope if those relationships are destroyed. This connects closely with borderline personality traits, since people with BPD features often have difficulties with emotional regulation and handling interpersonal stress. These can make online platforms feel “safer” or more manageable than real-life situations, or they may find themselves without any real-life relationships and forced to turn to social media to survive.

The I-PACE model also suggests that addiction builds gradually. If using social media gives someone emotional relief, even temporarily, they may start turning to it more often, especially during stress. This can also be explained through positive and negative reinforcement; if using social media, there is a positive emotion. That behaviour is reinforced: if a negative emotion is reduced, that behaviour is reinforced again (Michael, J. 2005). Over time, this can become an automatic learned pattern through habitual use. This relates directly to resilience, as individuals with lower resilience may find it harder to manage stress in healthier ways, which in turn increases the likelihood that social media becomes their main coping strategy, thus leading to an addictive pattern through a reward system. Cognition, or how a person views and interprets themselves and their social environment, their identity, is another important part of the model. If someone tends to think negatively about themselves, is plagued by low self-esteem, or depends heavily on external approval and on what people think of them, then social media can become highly reinforcing and addictive. Likes, comments, and follower interactions may become a constant source of reassurance, acceptance, and positive attention, significantly increasing the risk of dependence. Overall, the I-PACE model emphasises that addictive social media use, like all addictions, does not

develop from one single factor. Instead, it emerges from a combination of personality traits like BPD traits, emotional states like intense anxiety, grief or anger, that the individual is unable to manage, coping abilities, problematic use of dysfunctional ways of emotional regulation, in combination with low resilience and the repeated rewards users receive from engaging with social media, which results in a learned behavioural pattern. This makes the model a useful framework for understanding why young adults, in particular, may develop problematic or addictive online behaviours on social media.

1.3 Additional Empirical Findings: Social Media Addiction and Young Adults

During recent times, research has increased on this particular age group, and specifically adolescents to young adults, because they seem to be the most vulnerable to developing addictive patterns around social media usage. Young adults rely heavily on social media for communication, entertainment, self-presentation, and sometimes even emotional support, mostly avoiding in-person social interactions and the development of necessary social and communication skills, due to the increasing use of social media, which simplifies social interactions. Because of this, and several other factors, such as self-image, personality, and upbringing, several studies have shown that individuals between 18 and 30 tend to score higher on dysfunctional or addictive use compared to older adults (Kircaburun & Griffiths, 2018; Hussain & Griffiths, 2018). This makes sense, considering that social media, as an effective tool, has become part of our everyday lives, and for young adults, it helps them study, work, date, and keep up with friends. Additionally, research shows that younger users spend more time on social media platforms and often see them as part of their identity, social interaction, and entertainment (Kuss & Griffiths, 2017; Odgers & Jensen, 2020). As mentioned before, social media is an effective everyday tool. With age and wisdom, older

adults use it more effectively for their own benefit, and usually do not lose themselves to the use. From a developmental point of view, young adulthood is a stage when difficulties such as identity, peer approval, and social belonging are especially important and strongly influence emotions and everyday life. Social media offers immediate feedback through likes, comments, and followers, which can strengthen the urge to stay online and check notifications, while also fostering positive self-views and emotions. Neurological findings also support this idea, showing that the reward system in younger adults is more sensitive to social validation and novelty, and that it promotes acceptance from others (Foulkes & Blakemore, 2018). This may also explain why repeated behaviour of checking notifications becomes significantly easier to develop at this age. Younger individuals also experience more pressure from social comparison and fear of missing out due to personal image and identity difficulties, both of which have been linked to compulsive and addictive social media use. Fear of Missing Out (FoMO), as another factor that seems to influence addictive social media use, has been found to predict problematic usage in young adults, mainly because the fear of being excluded or “left behind” pushes them to stay connected constantly (Przybylski et al., 2013). People who experience loneliness or insecurity are especially vulnerable to this, and it also fits with previous findings showing that individuals with BPD traits often experience interpersonal hypersensitivity and chronic fears of abandonment (Trull et al., 2011), which could encourage them to stay online to avoid feeling disconnected.

These tendencies may also contribute to higher levels of anxiety and emotional instability that promote dysfunctional online activity. Several studies have shown that symptoms of social media addiction decrease as age increases, which means that younger users are the ones most at risk (Keles et al., 2020). Social comparison has always plagued young adults, with social media platforms, this has increased dramatically and has increased addictive use and the need to show the world that “their lives are perfect”; this pressure increases

dysfunctional use. In addition, research has shown that comparing oneself to people who seem better (upward compare) is linked to lower self-esteem, higher anxiety and more compulsive use (Vogel et al., 2014). This becomes even more difficult and intense for individuals who already struggle with emotional regulation or unstable self-image, which connects directly with borderline personality traits.

Additionally, another developmental factor that concerns identity formation during emerging adulthood is that, between the ages of 18 and 30, individuals explore their personal identities, social roles, and self-concepts (Arnett, 2000; Odgers & Jensen, 2020). Social media provides tools that promote self-presentation, allowing individuals to select which aspects of themselves to display, experiment with their identities, and receive feedback from other users (Vogel et al., 2014; Kuss & Griffiths, 2017). This can be supportive for identity development, excessive reliance on external validation can increase susceptibility to addictive patterns of use (Andreassen et al., 2017; Kircaburun & Griffiths, 2018). This can occur when self-worth becomes closely associated with online feedback and, as a result, promotes the development of stronger dependency on online approval, and this can be particularly relevant for individuals with an unstable image of themselves or identity difficulties, which are core characteristics of borderline personality disorder (Trull et al., 2011; Liebke et al., 2017). In addition, continuous comparison with idealised online images and identities can also contribute to the increase of emotional distress that can lead to compulsive engagement, in particular for individuals who already are experiencing high anxiety or low resilience (Vogel et al., 2014; Marino et al., 2018). Therefore, developmental identity processes may partially explain why younger adults seem more vulnerable to developing addictive social media usage.

Many young adults also use social media to escape negative emotions, as a form of coping or avoidance. Marino et al. (2018) found that people who turn to social media for emotional coping are more likely to report addictive patterns of use, and this makes perfect sense, since they will repeat patterns that promote positive emotions. This fits well with both Griffiths' mood-modification component and the I-PACE model. When someone feels overwhelmed or anxious and uses social media to distract themselves, the behaviour can become repetitive and harder to control over time and thus lead to addiction. In conclusion, age appears to significantly influence vulnerability to problematic social media use. Younger people are more exposed to the rewarding environment of social media and the social pressure that comes with it, making them more likely to develop addictive patterns and behaviours. These developmental patterns help explain why we chose younger adults to participate in the study and why we aimed to assess several psychological risk factors.

Gender appears to be a significant factor in how people use social media and in who is more likely to develop addictive patterns. Several studies suggest that women tend to use social media more frequently than men and often for more emotionally driven reasons. It appears to come down to image and how women perceive their value. For example, women are more likely to use social media to maintain relationships, express emotions, and seek social validation. At the same time, men usually engage with these platforms for entertainment, information, or specific interests (Smith & Anderson, 2018). Because of these different motivations for each gender, women may be more prone to and exposed to usage that may encourage addictive patterns and behaviour, such as constant checking, comparison, and validation-seeking, with all these behaviours linked to problematic use. Research also shows that females generally score higher on measures of problematic or addictive social media use (Andreassen et al., 2017; Kuss & Griffiths, 2017). One explanation is that many social media platforms emphasise appearance, interpersonal feedback, and social comparison; these pillars

essentially form what some women believe is their value, and as a result, women tend to engage more heavily online. Emotional factors, such as anxiety, lower self-esteem, and concerns about social acceptance, may also interact with social media differently for women, increasing the likelihood of compulsive or repetitive use (Marengo et al., 2022), however this is also common in males, just not as commonly reported by males due to again the “ideal image” of a man that is not emotional and does not look for validation from others. This pattern is also relevant when considering borderline personality traits, which, on first glance, are more commonly diagnosed in women and involve emotional instability, fears of abandonment, and unstable self-image. According to Johnson, D. M et al, this is the case because the majority of the literature on borderline personality disorder focuses on females. In addition, it comes down to men's ideal image, and most of the time, even when the traits are present, males never report them. These characteristics can lead individuals on paths that are more likely to seek reassurance and connection through social media, contributing to a higher risk for the development of addictive patterns. Overall, the literature suggests that gender differences in emotional needs, motivations for using social media, and a tendency toward social comparison may help explain why women often score higher on problematic social media use than men, while also maintaining a cautious approach, since the literature tends to focus on women.

In conclusion, a consistent theme in the literature is that dysfunctional social media use does not seem to develop from one factor alone, instead, it seems to be result from several factors and to be specific, vulnerabilities working together such as emotional instability, anxiety, low resilience, loneliness and difficulties with self-identity all of which are relevant to traits of borderline personality disorder and this combination of factors aligns strongly with the

variables in the present study. Since young adults are still forming their identity and often experience emotional ups and downs, they may be more susceptible to being influenced by unhealthy online behaviours that can lead to addictive patterns. To sum up, existing research makes it clear that social media addiction seems to be strongly linked to emotional and psychological factors, especially in younger adult populations. These findings support the relevance of examining borderline personality traits, anxiety levels and resilience in relation to social media addiction among young adults.

1.4 Research Gap

Although social media addiction has gained a lot of attention in recent years, to be specific after 2015 and since covid19, much of the existing research treats social media addiction as a subsection and mostly focuses on areas such as internet addiction, problematic smartphone use, or specific platforms like Facebook, which were popular (Andreassen, 2015; Kuss & Griffiths, 2017). Far fewer studies specifically examine social media addiction among young adults aged 18–30; most combine young adults and adolescents, or focus on university students (Hussain & Griffiths, 2018; Keles et al., 2020). Generally, this group appears to spend the most time online and often shows early signs of problematic, addictive or compulsive patterns (Kircaburun & Griffiths, 2018).

Another difficulty is that while there is work combining borderline personality traits and internet addiction, it appears that all the factors have not been examined together yet.

Research has focused on variables such as narcissism, self-esteem, loneliness and depression, but has not combined borderline personality traits, resilience, and anxiety in the same model (Andreassen et al., 2017; Casale & Banchi, 2020). Each of these characteristics has been linked individually to emotional difficulties and addictive patterns, yet very few studies

explore how they interact with one another or whether they jointly predict addictive social media use in young adults (Brand et al., 2016; Brand et al., 2019).

There is also a gap in the way borderline personality traits are studied. At the same time, most research focuses on clinical samples, even though many young adults without an official diagnosis still exhibit subclinical traits that influence their emotional stability, relationships, and coping strategies (Trull et al., 2011). While the role of resilience is often overlooked, existing findings suggest that people with higher levels of resilience cope more effectively with stress and may be less likely to rely on social media as a form of escape or avoidance (Smith et al., 2008; Hu et al., 2015). Similarly, although we know anxiety influences addictive patterns and has frequently appeared in studies linked to social media use, it is rarely examined together with factors such as resilience and borderline traits within a single predictive framework (Vannucci et al., 2017).

A further limitation in the literature is the paucity of research on cultural environments, such as Cyprus. Most studies were conducted in the US, Western Europe, or Asia, and cultural differences influenced them. They may shape both social media engagement and the psychological factors that influence usage and are connected to it (Odgers & Jensen, 2020). This means that there is a limited understanding of how these factors may influence social media usage and what this might look like for younger adults in Cyprus. In conclusion, the existing literature does not fully explore or explain how borderline personality traits, resilience and anxiety may work together to influence social media usage and the pathway to addiction. This creates a gap that this present study aims to explore and address by offering a more concrete and complete picture of the psychological factors associated with addictive or dysfunctional social media usage in young adults. Additionally, to these conceptual gaps, there are also methodological limitations in the existing literature that justifies the present

study, and to be specific many studies that examine addictive or dysfunctional social media use primarily rely on correlational designs that assess single predictors, isolated without examining their contribution when entered simultaneously into models predicting addictive behaviour (Kuss & Griffiths, 2017; Hussain & Griffiths, 2018). As a result, it remains unclear which psychological factors retain explanatory power when others are controlled for, and whether certain variables operate directly or indirectly on social media addiction (Brand et al., 2016; Brand et al., 2019). This is relevant for resilience and anxiety, which may work as mediating or indirect mechanisms rather than direct predictors (Hu et al., 2015). These methodological limitations can be addressed through multivariate analyses, which may provide a more nuanced understanding of how borderline personality traits, coping resources, and emotional factors can together contribute to dysfunctional or addictive social media usage in young adults (Brand et al., 2019).

1.5 Research Questions

Based on the existing literature and the aims of the present study, the following research questions were formulated:

1. Is there a relationship between social media addiction and indications of BPD, anxiety, and/or low resilience?
2. Is anxiety correlated with increased use of social media and higher levels of social media addiction?
3. Does low resilience correlate with higher social media addiction?
4. Do indications of BPD predict higher levels of social media addiction?
5. Do high anxiety, low resilience, and indications of BPD combined increase the likelihood of social media addiction?
6. Does gender affect the use of social media?

These questions guided the development of the study's hypotheses and the selection of statistical analyses for the results chapter.

1.6 Hypotheses

Based on the existing literature and the aims of the current study, the following hypotheses were developed:

H1. Social media addiction will be positively associated with indications of BPD, anxiety, and low resilience.

H2. Higher anxiety levels will predict higher social media addiction.

H3. Lower resilience will predict higher social media addiction.

H4. Individuals with higher indications of BPD will report higher levels of social media addiction.

H5. The combined effect of high anxiety, low resilience, and BPD traits will significantly predict higher social media addiction.

H6. Gender influences addictive and dysfunctional use of social media.

1.7 Purpose and Importance of the Current Research

The purpose of this research is to examine how specific psychological factors, such as borderline personality traits, anxiety, and resilience, may influence or relate to social media usage and addiction in young adults. Although social media addiction or dysfunctional social media use is a relatively new concept that came to be after the introduction of social media to everyday life, its impact on daily life is becoming more noticeable, especially among people

aged 18–30 and young adolescents (Andreassen, 2015; Kuss & Griffiths, 2017; Odgers & Jensen, 2020). Social media is now embedded in everyday life and in modern routines. Yet, we are still not able to fully comprehend or understand why some individuals develop addictive patterns, while others do not. Because of this, it is important to explore the psychological mechanisms that may increase the likelihood of dysfunctional use, which some have already been associated with addictive behaviours (Brand et al., 2016; Brand et al., 2019). Most existing studies have the tendency to focus on one factor at a time, such as anxiety or self-esteem, and rarely investigate or examine how multiple psychological variables influence or interact with each other to lead to dysfunctional use or addictive patterns (Kuss & Griffiths, 2017; Marino et al., 2018). Borderline personality traits, which include emotional instability, difficulties in relationships, and fears of abandonment, have not been studied deeply or extensively in relation to social media addiction, even though these characteristics themselves could logically contribute to more compulsive, addictive or dysfunctional patterns of online behaviour (Trull et al., 2011; Liebke et al., 2017). This also applies to resilience, which is generally associated with protective factors from addiction or dysfunctional behaviour. While resilience may act as a protective factor, it has not yet been examined thoroughly or paired alongside borderline personality traits and anxiety within the same model (Smith et al., 2008; Hu et al., 2015). For this reason, the present study aims to address these gaps by pairing and examining these variables together and determining which of them predict or influence higher levels of social media addiction. Another important aspect of this research is the cultural context. At the same time, most studies on social media addiction are completed in the United States, Western Europe, or Asia, very little work has been conducted in Cyprus, and since the scientific community is aware that cultural expectations and social norms can influence how people use social media, collecting data from young adults in Cyprus can offer a clearer and more relevant understanding of the issue

within this population, while also providing a different perspective (Kuss & Griffiths, 2017; Odgers & Jensen, 2020).

In general, the importance of this study is determined by its capability to help identify which individuals may be more vulnerable to developing addictive or dysfunctional patterns of social media use. By understanding these relationships, there may be a way to support future prevention or intervention strategies, particularly for young adults who appear to already struggle with emotional regulation, anxiety, interpersonal difficulties, and coping strategies (Brand et al., 2016; Marino et al., 2018). By investigating and highlighting the combined effects of borderline personality disorder traits, anxiety, and resilience, the study contributes to a more complete understanding of social media addiction and the psychological and emotional processes that may reinforce it or even trigger it (Brand et al., 2019). In conclusion, the literature suggests that social media addiction is formed and shaped by a combination of emotional, psychological, personality and coping factors, but these relationships are still not fully understood, especially in young adults and within the Cypriot cultural context (Kircaburun & Griffiths, 2018; Marino et al., 2018). Since existing studies have not examined the combination of borderline personality traits, anxiety, and resilience together, the current research aims to explore how these variables interact, influence and whether they can predict levels of social media addiction. The following chapter outlines the methodology used to investigate these relationships, including the sample, instruments, and the statistical procedures chosen to address the research questions.

2 Methodology

2.1 Participants

The final sample consisted of 167 young adults who used social media, with a mean age of 24.96 years ($SD = 3.50$). Participants' ages ranged from 18 to 30 years ($M = 24.96$, $SD = 3.50$). Of the original 200 individuals who completed the questionnaire, three were removed because they were not using social media, and another 30 were removed because they were outside the age range of 18–30 years. Participants were recruited specifically for this study through online advertisements on social media, word of mouth, and university networks. This was a non-probability convenience sample, as participation was open to anyone within the required age range who used social media. All participants had to be between 18 and 30 years old and active users of at least one social media platform.

2.2 Procedure

Before starting the questionnaires, every participant completed a consent form confirming their agreement to participate. They were informed that their participation was voluntary and anonymous, and that they could withdraw themselves or their data at any time if they wished. In general, all participants were informed about confidentiality, privacy, and their rights. The questionnaires were completed online through Google Forms. Ethical approval for the study was granted by the National Bioethics Committee of Cyprus (NEBC) on 26 June 2023. Data collection began on 3 April 2025. Following the consent form and demographic questions,

participants completed the questionnaires in the following order: the Bergen Social Media Addiction Scale (BSMAS), the MSI-BPD screening tool, the Brief Resilience Scale (BRS), and lastly the Beck Anxiety Inventory (BAI).

2.3 Instruments

Demographic Questionnaire

A short four-question demographic questionnaire was used. It included age, gender, profession, and whether the participant was an active social media user. These questions helped confirm study eligibility, provided basic descriptive information, and assisted in assessing gender differences and study exclusions.

Bergen Social Media Addiction Scale (BSMAS)

The BSMAS is a commonly used tool for measuring social media addiction. It consists of 6 items, each linked to one of the main components of addiction: salience, mood modification, tolerance, withdrawal, conflict, and relapse. Items are rated on a 5-point Likert scale ranging from 1 (very rarely) to 5 (very often). Total scores range from 6 to 30, with higher scores indicating greater levels of problematic social media use. Although there is no strict diagnostic cut-off, Andreassen et al. (2016) suggested that scores of 19 and above indicate a risk of addictive use. The tool was adapted from the original Bergen Facebook Addiction Scale and has been validated in Greek (Dadiotis et al., 2021). Previous research reported Cronbach's alpha values around .83–.86, showing good internal consistency. The BSMAS was chosen as an instrument for the present study because it has been validated in Greek.

MSI-BPD (MacLean Screening Instrument for BPD)

The MSI-BPD (Zanarini et al., 2003) is used to identify indications of borderline personality disorder but not to diagnose it. It contains 10 yes/no questions, and each “yes” is scored as 1. Scores range from 0 to 10. A score of 7 or more suggests a high probability of BPD, although a formal clinical interview is needed for diagnosis. Zanarini et al. (2003) reported good reliability, with Cronbach’s alpha around .79. It was chosen as an instrument for the present study because it is used to calculate indicators of BPD rather than to diagnose it.

Brief Resilience Scale (BRS)

The BRS (Smith et al., 2008) measures resilience, defined as the ability to “bounce back” from stress. It includes 6 statements rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Three items are worded negatively and require reverse scoring. After scoring, the sum is calculated. Total scores range from 6 to 30. Based on the standard BRS classification adjusted for sum scoring, scores 6–18 indicate low resilience, scores 19–26 indicate normal resilience, and scores 27–30 indicate high resilience. The BRS has shown good reliability internationally ($\alpha \approx .80-.91$). Greek versions have also shown acceptable consistency, although reliability varies across studies. It was chosen as an instrument for the present study in order to calculate resilience.

Beck Anxiety Inventory (BAI)

The BAI (Beck et al., 1988) measures the severity of anxiety symptoms. For the present study, it will be used to calculate anxiety. It contains 21 items rated on a 4-point scale from 0 (not at all) to 3 (severely). Total scores range from 0 to 63 and are interpreted as follows:

- 0–7 minimal anxiety
- 8–15 mild anxiety
- 16–25 moderate anxiety

- 26–63 severe anxiety

The BAI has excellent internal consistency ($\alpha = .90-.94$) and has also been validated in Greek with strong reliability (Panayiotou et al., 2017). It was also selected as an instrument for the present study due to the Greek validation.

2.4 Data Processing and Analysis

Once data collection was complete and ineligible participants were removed, the dataset was transferred to Microsoft Excel, where initial calculations such as SUM and MEAN were used to compute each participant's questionnaire scores. Afterwards, the data were imported into IBM SPSS Statistics 29.0.2.0 for analysis.

In total, six variables were included:

1. Social media addiction (BSMAS)
2. Borderline personality traits (MSI-BPD)
3. Resilience (BRS)
4. Anxiety (BAI)
5. Age
6. Gender

A preliminary Univariate ANOVA was conducted to examine potential gender differences across all main variables. Pearson's r correlations were then used to explore the relationships between social media addiction, borderline traits, resilience, anxiety, and age. Finally, a linear regression analysis was performed with BSMAS as the dependent variable to identify which variables significantly predicted levels of social media addiction.

Normality was checked using Kolmogorov–Smirnov and Shapiro–Wilk tests. Most variables showed significant deviations from normality, except for BSMAS, which had a non-significant Shapiro–Wilk value ($p = .068$). However, given the sample size ($N = 167$) and the robustness of parametric tests, the analyses proceeded as planned (Field, 2018).

3 Results

For the results section, we will be detailing the findings of the statistical analysis, examining the relationships between each variable, and, specifically, social media addiction, borderline personality traits, resilience, anxiety levels, age and gender.

3.1 Descriptive Statistics

Descriptive statistics were calculated for all study variables. Mean scores for the study measures were as follows: BSMAS ($M = 17.84$, $SD = 5.51$), MSI-BPD ($M = 3.46$, $SD = 3.04$), BRS ($M = 19.57$, $SD = 5.36$), and BAI ($M = 39.61$, $SD = 14.92$). Overall, the sample displayed below the threshold of social media use, moderate resilience, relatively low borderline features, and severe range anxiety symptoms. Established interpretations of the scale can explain this. Firstly, the social media scores were slightly below the risk thresholds (Andreassen et al., 2016). The borderline trait scores were below the clinical screening cutoff (Zanarini et al., 2003), and the elevated anxiety scores were in the severe range of the Beck Anxiety Inventory classification system (Beck et al., 1988).

3.2 Gender Differences

Levene's tests confirmed equality of variances for all variables (BSMAS: $F(1, 165) = 3.226$, $p = .074$ / BPD: $F(1, 165) = 0.73$, $p = .394$ / BRS: $F(1, 165) = 0.264$, $p = .608$ / BAI: $p = .259$ $F(1,165) = 1.284$).

Univariate ANOVAs with each factor separately as a dependent variable and Gender as a fixed factor showed a significant effect of Gender for BSMAS ($F(1, 165) = 5.393, p = .021, \eta^2 = .032$) and BRS ($F(1, 165) = 6.699, p < .05, \eta^2_p = .039$), but not for BPD ($F(1, 165) = 1.816, p = .180, \eta^2 = .011$) and BAI ($F(1, 165) = 0.509, p = .476, \eta^2 = .003$). For BSMAS, women showed higher addiction levels than men (Women: $M = 18.86, SD = 4.825$ / Men: $M = 16.91, SD = 5.937$), while for BRS, men exhibited higher resilience than women (Women: $M = 18.47, SD = 4.909$ / Men: $M = 20.59, SD = 5.573$).

Figure 1. Mean Social Media Addiction (BSMAS) Scores by Gender (± 1 SD)

Figure 1 illustrates the mean differences in social media addiction scores between males and females.

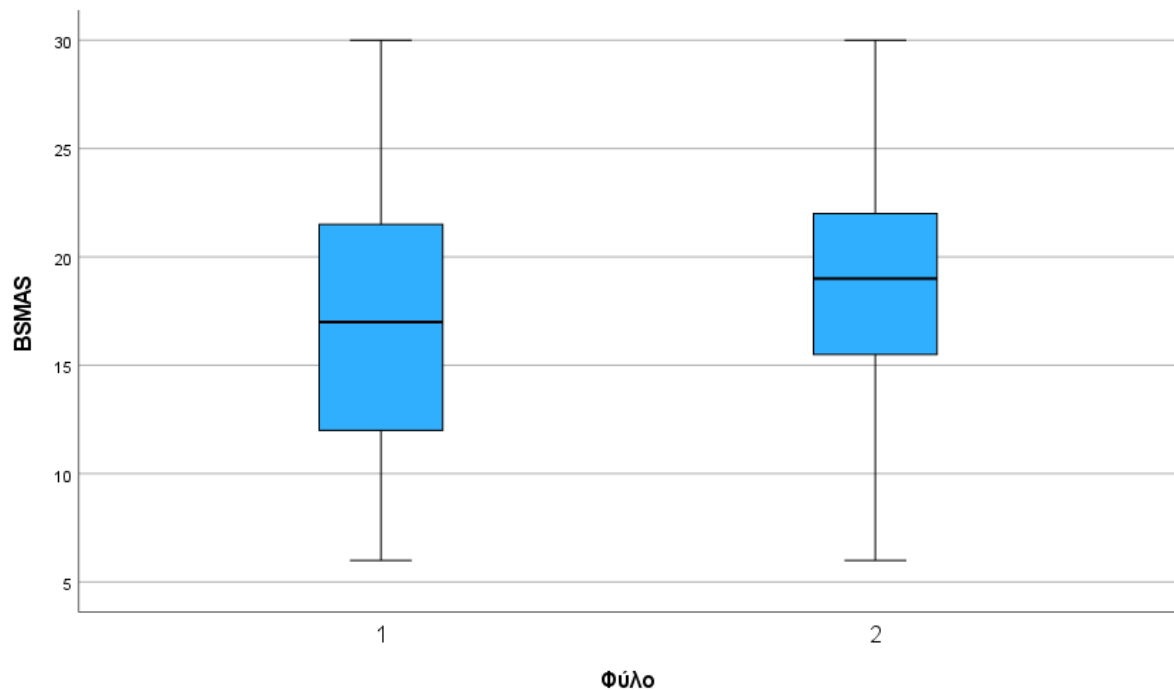
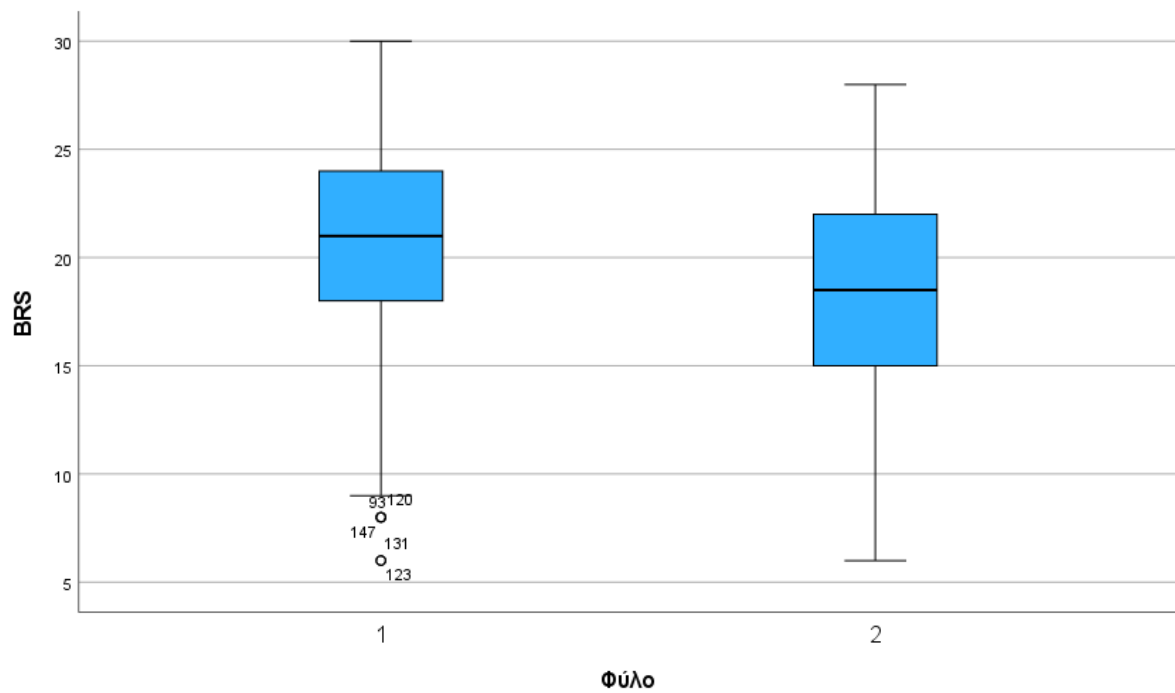


Figure 2. Mean Resilience (BRS) Scores by Gender (± 1 SD)

Figure 2 presents the mean resilience scores for males and females.



3.3 Correlational Analysis

Afterwards, Pearson's correlations were computed among the main study variables (Table 1). It showed that Age correlated negatively with BSMAS ($r = -.196$, $p = .011$), MSI-BPD ($r = -.191$, $p = .014$), and BAI ($r = -.185$, $p = .017$), suggesting that younger participants exhibited higher social media addiction, borderline features, and anxiety. There was no significant correlation between Age and BRS ($r = -.022$, $p = .778$).

In addition, BSMAS was positively correlated with MSI-BPD ($r = .421$, $p < .001$) and BAI ($r = .411$, $p < .001$), and negatively with BRS ($r = -.353$, $p < .001$). In conclusion, participants reporting higher social media addiction have also shown more borderline traits and anxiety, but lower resilience.

Additionally, Borderline traits were positively associated with anxiety ($r = .680, p < .001$) and negatively associated with resilience ($r = -.474, p < .001$). Likewise, resilience was strongly and inversely associated with anxiety ($r = -.630, p < .001$), indicating that higher resilience corresponded to lower anxiety levels.

Table 1

Pearson's Correlations Between Study Variables (N = 167)

Variable	1	2	3	4	5
1. Age	—				
2. BSMAS (Social Media Addiction)	-.196*	—			
3. MSI-BPD (Borderline Traits)	-.191*	.421**	—		
4. BRS (Resilience)	-.022	-.353**	-.474**	—	
5. BAI (Anxiety)	-.185*	.411**	.680**	-.630**	—

Note. $p < .05$; $p < .01$.

3.4 Multiple Regression Analysis

A multiple regression analysis was conducted in order to determine whether borderline personality traits (MSI-BPD), resilience (BRS), anxiety (BAI), Age and Gender, explain and predict the levels of social media addiction (BSMAS). The overall model was highly statistically significant, $F(4, 162) = 13.951, p < .001$, accounting for 25.6% of the variance in BSMAS scores ($R^2 = .256$, Adjusted $R^2 = .238$). This indicates that the combined predictors meaningfully explained levels of social media addiction.

Regression Coefficients showed that Borderline personality traits ($\beta = .285$, $p < .01$) and Gender ($\beta = .208$, $p < .01$) were significant positive predictors. Anxiety and Resilience were not significant predictors of Social Media addiction (BAI: $\beta = .195$, $p = .07$ / BRS: $\beta = -.054$, $p = .555$).

Figure 3. Estimated marginal means of social media addiction (BSMAS) by gender.

Figure 3 shows higher estimated marginal mean scores for social media addiction among females compared to males, with error bars representing ± 1 standard error.

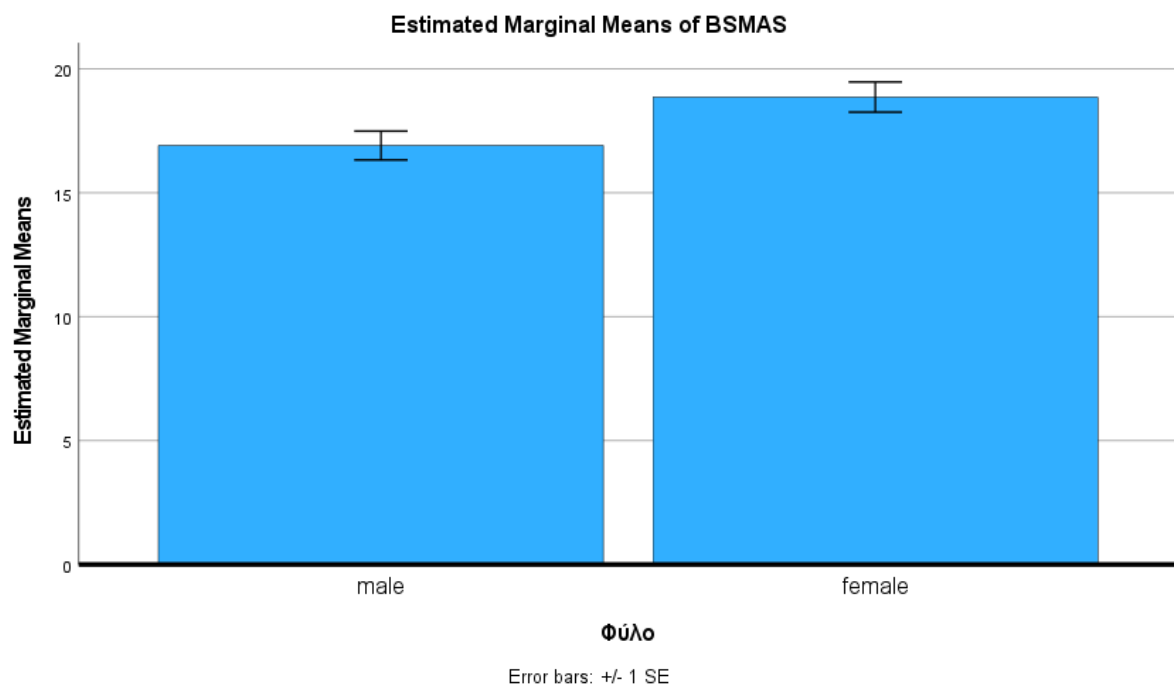
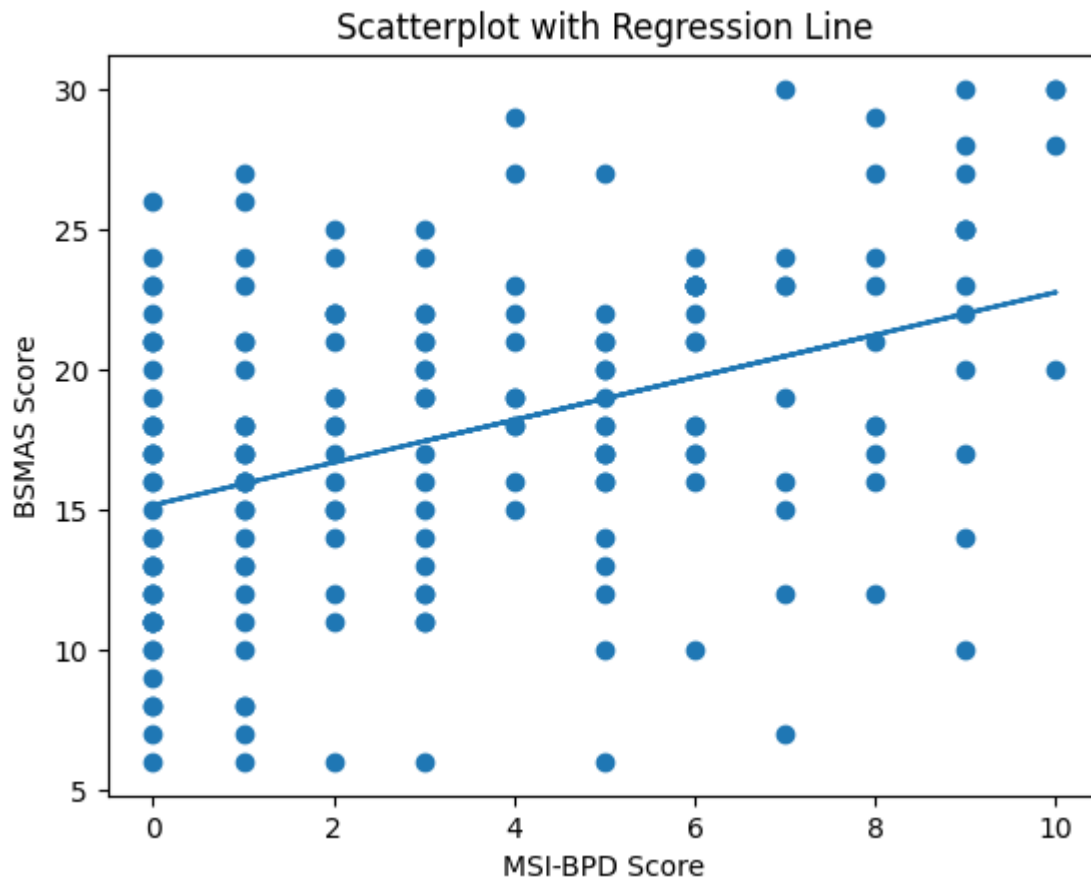


Figure 4. Scatterplot showing the relationship between Borderline Personality Disorder traits (MSI-BPD) and Social Media Addiction (BSMAS) and the regression line.



Residuals analysis supported the assumptions of normality, linearity, and homoscedasticity. Standardised residuals ranged from -2.742 to 2.238 , indicating no extreme outliers. The mean residual was approximately zero, confirming the model's adequacy and balance. The regression model has confirmed that borderline personality traits and gender were the most consistent predictors of social media addiction and showed the most influence and increase in its levels. In addition, anxiety showed a near-significant trend, impacting patterns of social media addiction effectively. At the same time, resilience was not a major contributor once other factors were considered, but was negatively associated. These results complement the correlational findings, emphasizing that emotional vulnerability and interpersonal instability which are characteristics of borderline personality disorder, are strongly linked and associated

to problematic and addictive social media use. Overall, the data suggest that younger participants, those with higher BPD traits and anxiety, and females, appear to be more prone to addictive patterns of social media usage. In contrast, resilience appears to serve as a protective factor, buffering against dysfunctional or addictive use of social media platforms.

Discussion

The current study was conducted with the objective of investigating whether social media addiction is influenced by traits of borderline personality disorder, anxiety levels and resilience. This was achieved using the following tools: Bergen's social media addiction scale, Brief Resilience scale, Maclean screening instrument, and Beck's anxiety inventory. The study aims to investigate the correlations between these factors and social media addiction, in a Greek-Cypriot population of ages 18-30.

The first research question aimed to examine the possible relation of social media addiction, indications of BPD, anxiety and low resilience and if these factors individually or together influence social media use, the 1st question ties all other questions together. The results of this research showed that social media is positively influenced by and associated with indications of BPD and anxiety, and negatively influenced by and associated with resilience. More specifically, individuals who reported higher levels of social media addiction also appeared to report higher levels of anxiety and stronger indications of borderline personality traits while at the same time, higher social media addiction scores have been linked to lower levels of resilience. These findings suggest that emotional vulnerability and difficulties in coping with emotions might translate into high anxiety levels (Vannucci et al., 2017), while indications of borderline personality disorder are closely associated to problematic and addictive patterns of social media usage (Andreassen et al., 2017).

These results seem to be consistent with previous research. Earlier studies have shown that higher anxiety is associated with increased, addictive and more compulsive use of social media, as individuals may turn to online platforms as a way to manage distress or seek reassurance (Vannucci et al., 2017). Also, previous findings show that personality-related characteristics, including traits related to emotional instability and interpersonal difficulties are linked to problematic and addictive social media use (Andreassen et al., 2017; Casale & Banchi, 2020). The negative association found between resilience and social media addiction also agrees with other studies suggesting that individuals with lower resilience are more likely to develop and rely on maladaptive coping strategies (Hu, Zhang & Wang 2015), which include excessive and addictive engagement with social media.

From a theoretical perspective, these findings can be interpreted through both Griffiths' Components Model of Addiction and the I-PACE model. Firstly, according to Griffiths' model, social media may function as a mood modification strategy for individuals who are experiencing anxiety or emotional instability and are reinforcing repeated use as a coping mechanism, thus increasing the risk of addictive patterns. Additionally, in line with the I-PACE framework, people with higher emotional vulnerability and lower coping resources may be more susceptible to using social media as a way to regulate negative emotions, which, over time, forms addictive patterns and strengthens compulsive use. In conclusion, the findings related to the first research question appear to support the idea that social media addiction is not an isolated behaviour, but rather one that appears to be closely linked to psychological characteristics such as anxiety, personality traits related to emotional instability, and lower resilience. This conclusion highlights why it is important to consider multiple psychological factors when examining problematic, dysfunctional and addictive social media use in young adults, and addictive behaviour in general. The additional questions aimed at checking how each factor, anxiety, resilience and indications of BPD

influence social media use. The 5th question sought to combine all factors and examine how they interact to influence social media use. Lastly, the 6th question aimed to showcase how gender appears to influence social media use.

The second research question examined whether anxiety is associated with increased or addictive social media use and thus higher levels of social media addiction. The purpose was to assess whether anxiety influences social media use. According to the findings of the present study, this question is partially supported, and to be specific, anxiety has been found to be correlated positively with addictive patterns associated with social media. In other words, participants with high levels of anxiety reported more frequent and compulsive use of social media. This suggests that anxiety is meaningfully related to dysfunctional and addictive social media use in young adults (Vannucci et al., 2017; Keles et al., 2020). These findings appear to be consistent with previous research that also showed correlations between anxiety and social media use. For example, according to Vannucci, Flannery, and Ohannessian (2017), young adults with self-reported higher anxiety levels tend to use social media more frequently, often as a way to cope with uncomfortable emotions or social stress, and this, as was discussed, is a pathway to addictive behaviour. In addition, Keles, McCrae, and Grealish (2020) found that anxiety is one of the most common psychological or emotional difficulties closely associated with dysfunctional social media use, especially in younger populations. As was discussed before, a possible explanation for this addictive relationship is that individuals with higher anxiety and difficulty regulating or managing anxiety, may use social media as a form of emotional regulation and as social media may offer temporary relief by providing distraction, reassurance, or a sense of connection, this may contribute to a pathway to addiction (Vannucci et al., 2017; Griffiths, 2005; Brand et al., 2016; 2019). This relief is often short-lived, which may lead individuals to repeatedly return to social media as a learned coping mechanism in order to manage anxiety. As was seen in the

present study, although anxiety was strongly correlated with social media addiction, it did not emerge as a significant independent factor or predictor in the regression analysis once other variables were taken into account. This suggests that the pathway to social media addiction is not affected by anxiety alone, but rather interacts with the other factors that were investigated in this research, such as borderline personality traits and resilience (Brand et al., 2016; 2019). In conclusion, anxiety can and may increase vulnerability to developing social media addiction, especially when individuals appear to lack effective coping mechanisms or experience significant emotional instability. So, anxiety is an important factor in dysfunctional and addictive social media use, as a contributing and a reinforcing factor.

Moving on to the third question, its purpose was to examine whether resilience negatively influences social media addiction. In short, the third question sought to determine whether resilience influences social media usage negatively. For example, does low resilience predict high social media usage or addiction, and high resilience predicts lower social media usage? According to the findings, this is partially supported, and resilience was found to be negatively correlated with social media addiction, which suggests that resilience is a protective factor. In fact, high resilience acts as a protective factor for a multitude of dysfunctional behaviours and psychopathological symptoms (Hu, Zhang & Wang 2015).

These results appear to be in agreement with previous research showing that individuals with higher resilience generally cope better with stress and are less likely to develop and rely on maladaptive coping strategies, which can lead to addictive patterns, such as excessive technology and social media usage. Supporting this, according to Hu, Zhang & Wang (2015), resilience is strongly associated with better mental health and significantly lower levels of psychological distress, which, according to even the definition of resilience, is its exact function. Additionally, and more specifically, lower resilience is linked to higher levels of technological addictions, including social media addiction, supporting the idea that resilience

acts as a protective factor against compulsive online behaviour, which is again defined as its clear function. One way to describe this relationship is that an individual with low resilience can have fewer coping mechanisms developed for emotional regulation, and may find comfort in social media usage. This pattern repeats itself and becomes an addiction (Hu et al., 2015). Despite the significant negative correlation, resilience did not appear as a significant predictor in the regression analysis when anxiety, borderline personality traits and gender were included. This shows that resilience on its own may not predict social media addiction, but it may interact with anxiety, by regulating anxiety or, in general, regulating negative emotions, may lead to functional social media usage (Brand et al., 2016; 2019). In conclusion, it appears to act as an indirect influence on social media usage. This shows the importance of resilience, not just on addiction but on other psychopathological symptoms, discomfort or behaviours.

The fourth research question aimed to examine whether indications of BPD individually can increase social media usage and thus lead to addictive and dysfunctional patterns. Therefore, it was necessary to individually check how BPD symptoms may increase social media addiction and how. Due to the indications being emotional instability, fear of abandonment, and difficulties in maintaining interpersonal relationships, this may lead to increased reliance on social media for connection and reassurance (Longshore, 2021; Liebke et al., 2017).

According to the findings, this seems to be the case, and is strongly supported, specifically, the correlational analysis showed a significant positive relationship between indications of BPD and addictive use of social media. Participants who scored high on MSI-BPD also tended to score high on BSMAS, which means that individuals with self-reported high indications of BPD tended to report higher social media usage. Additionally, the multiple regression analysis showed that BPD traits are a significant predictor of excessive social media use. Even when anxiety, resilience and gender were included, BPD traits remained a

statistically significant predictor of social media addiction. These findings appear consistent with previous research suggesting that people with Borderline personality traits may find refuge in social media use to manage fears of abandonment, regulate intense emotions, or seek validation from others (Liebke et al., 2017; Longshore, 2021). This result is also explained well with both Griffiths' Components Model and the I-PACE model as BPD traits may increase vulnerability to salience, mood modification, and conflict, and if the individual uses social media as a coping mechanism even once, this may lead to the development of addictive and dysfunctional patterns (Griffiths 2005, Brand et al. 2016; 2019). In conclusion, BPD traits are a serious psychological risk factor for the development of social media addiction in young adults, regardless of gender.

The fifth research question investigated how the three factors combined influence social media use. To clarify, the question checks if the combination of resilience, anxiety, and indications of BPD influence social media use or addiction. Based on previous research, all of these factors have been found to influence social media usage, but have not been examined together (Andreassen et al., 2017; Vannucci et al., 2017; Hu et al., 2015). This question is partially supported by the findings of this study, which examined resilience, anxiety, borderline personality traits, and gender together in a multiple regression analysis. The overall model was statistically significant and explained a meaningful proportion of variance in social media addiction scores. According to these findings, the set of psychological factors is relevant to understanding social media use among young adults in Cyprus. Within the current model, borderline personality traits appeared to be a significant positive predictor for dysfunctional or addictive social media usage, while anxiety showed a weaker predictive effect. When accounting for all factors simultaneously, resilience did not emerge as a significant predictor, although it was significant at the bivariate level. Social media addiction strongly appears to be influenced by all three factors, but not all factors contribute equally.

BPD traits appear to be statistically significant, while anxiety also appears to contribute, but not at the same level. The findings suggest that resilience seems to act as a protective factor by reducing negative emotions and promoting emotional regulation, and to be specific, it also seems to be operating indirectly, by reducing anxiety or improving coping mechanisms and then reducing social media use, since with anxiety reduction it can lead to reduction in social media use, under specific circumstances (Hu et al., 2015). Although resilience did not emerge as a significant predictor in the regression model, it showed a strong negative association with anxiety, and anxiety was positively related to social media use and approached significance. Thus, this pattern shows that resilience may reduce dysfunctional social media use, as anxiety decreases and the likelihood of engaging in social media use under specific circumstances (Hu et al., 2015).

These results are in line with the I-PACE model which showcases that addictive patterns and behaviors develop through the interaction of personal vulnerabilities, emotional states and coping processes, showing that individuals with high anxiety levels and indications of BPD may be more likely to use social media for emotional regulation and thus follow the pathway to addictive behavior, while low resilience may increase this vulnerability further (Brand et al., 2016; 2019). In conclusion, social media addiction is best understood as the result of several psychological factors, with BPD traits being a central predictor.

Lastly, the sixth research question aimed to investigate the effects of gender on addictive and dysfunctional social media usage. According to the research findings, there are some indications that gender may influence social media usage. More specifically, female participants reported significantly higher social media use than male participants, but the effect size was small, suggesting that while gender is not a central factor, it may influence social media use. In addition, the results once again appear to follow earlier research on dysfunctional or addictive social media use more commonly in women. This may be

explained by the broader literature that reports that women in general report higher levels of internalizing symptoms like anxiety, which may lead to an increase in social media usage by developing coping mechanisms that lead to addictive pathways. In addition, gender differences may indirectly influence social media usage through personality-related factors. BPD symptoms that involve emotional instability and fear of abandonment are more often diagnosed in women. Lastly the effect size of gender was small, and this clarifies that gender alone cannot explain social media addiction, but instead is working alongside other factors to predict social media usage. In conclusion there appear to be gender differences in social media usage, with females seemingly being slightly more prone to dysfunctional or addictive use, however it must always be noted that gender stereotypes exist.

Implications for Counselling Psychology

The findings of the present study have revealed several implications of significant importance for counselling psychology and psychological practice in general, specifically when working with young adults who report dysfunctional or problematic social media use. The results strongly suggest that social media addiction is closely connected to emotional vulnerability, anxiety, borderline personality traits and low resilience rather than being a purely behavioral habit. This suggests the importance of approaching social media addiction not as a simple self-control difficulty but as a behaviour that may serve specific interpersonal and emotional functions for individuals. One of the key implications of the findings is the role of anxiety in social media usage. Although it did not emerge as a strong independent predictor in the regression analysis, it was correlated strongly with dysfunctional and addictive use of social media and appears to maintain an important role in reinforcing and maintaining dysfunctional social media use. For counselling psychologists, this suggests that when clients have been assessed with problematic social media use, it is important to assess and treat possible

underlying anxiety symptoms, while also teaching appropriate coping mechanisms and emotional regulation techniques, because social media may be used as an avoidance of negative emotions and, in this case, anxiety (Vannucci et al., 2017). In addition, BPD traits appear to be an important implication for dysfunctional social media usage, as they emerged as the strongest predictor of social media addiction in the present study. The findings additionally highlighted that individuals reporting the following symptoms of emotional instability, fear of abandonment, and difficulties in maintaining interpersonal relationships appear to be particularly vulnerable to developing addictive patterns around social media use (Liebke et al., 2017; Longshore, 2021). In counselling psychology, this highlights how important a careful assessment of personality traits and difficulties in relationships appears to be for clients who report social media addiction. Social media may be used to provide temporary feelings of connection and/or validation, and this may, over time, reinforce dependence and lead to emotional dysregulation (Griffiths 2005, Brand et al. 2016; 2019). Additionally, according to the findings of the research, resilience appears to be a protective factor, with its function being indirect by being negatively associated with anxiety and social media addiction, which in turn suggests that individuals with developed coping skills and emotional regulation techniques may be less likely to heavily rely on social media for emotional regulation or avoidance (Hu et al., 2015). For counselling psychology, this informs that tackling social media addiction or problematic social media usage is possible through strengthening resilience, developing appropriate coping strategies, emotional awareness and problem-solving skills. In short dealing with the symptom that may provoke social media addiction appears to effectively assist in regulating social media use. Lastly, the results highlight the grave importance of early identification and prevention among young adults. When reports are identified of excessive social media use, psychologists may benefit heavily from screening for anxiety, emotional instability, and coping difficulties. Early identification

and prevention may very well prevent the development of addictive patterns and significantly reduce the negative impact of dysfunctional social media use.

Limitations

Despite the meaningful findings of the present study, several limitations should be acknowledged to provide a complete and accurate view and interpretation of the results and to inform planning for future research. Firstly, the cross-sectional design of the study significantly hinders the ability to draw causal conclusions. Even though significant associations were found between social media addiction, anxiety, resilience and BPD traits, the direction of these associations cannot be determined; for example, it is not possible to conclude if BPD traits lead to increased social media use, or if increased social media use contributes to BPD traits, or anxiety. Longitudinal designs would be necessary to examine how these variables influence each other over time and to clarify potential causal pathways (Creswell, 2017). Another limitation is the use of self-report measures; all variables were calculated and assessed using self-administered questionnaires, which may be influenced by response biases such as lack of insight, social desirability, inaccurate self-perception, and ideal self. This is extremely relevant for sensitive subjects and constructs such as BPD traits and addiction, where participants may exaggerate or downplay symptoms (Andreassen, 2015). Additionally, self-report tools measure behaviour as perceived by the participant rather than objective behaviour or observation; this may limit the accuracy of the findings. Closely tied to this is the use of screening tools rather than diagnostic instruments; the MSI-BPD was used to assess indicators of BPD, but it is not used to provide a clinical diagnosis, and therefore, the results reflect BPD traits rather than confirmed cases of BPD. This hinders the generalizability of the results to clinical populations and suggests that caution must be exercised when interpreting how strong the association is between BPD and social media addiction (Zanarini et al., 2003). Another important limitation is related to the interpretation

of gender differences in social media addiction. Although the findings reported that females showcased higher levels of social media addiction compared to males, the effect size was small. Despite the results appearing to be consistent with other studies showing a tendency from women to use social media more frequently, in addition earlier studies showcased that women are more likely to use social media to maintain relationships, for emotional expression, or seeking social validation, while men appear to be using social media in a more instrumental and entertainment focused way, however as it is stated in the limitations part of this research, it has to be mentioned that gender stereotypes and roles may influence the responses of participants to certain questions (Andreassen, C. S., Pallesen, S., & Griffiths, M. D. 2017). This suggests that gender itself explains a very limited proportion of variance in social media addiction. While also considering gender bias, therefore gender should not be viewed as a primary factor in social media addiction, but rather as a factor that may interact with other psychological or emotional factors such as anxiety, BPD traits and resilience. Additionally, gender was measured in a binary manner and therefore does not account for gender diversity or the influence of gender identity, roles, and social expectations on social media behaviour. In the past, previous research has shown that societal norms and gender-related expectations or bias may influence how participants report social media use and emotional distress, negatively affecting self-report results (Marengo et al., 2022). With all this in mind, conclusions regarding gender differences should be interpreted cautiously, and future research should investigate gender effects using more inclusive and nuanced methods.

Another important limitation that's worth mentioning is the sampling method; the study relied on a convenience sample that was recruited through university networks and social media, this may well limit representation to mainly university students and participants more active on social media which may in turn increase levels of social media use for the present study. The sample also consisted exclusively of young adults aged 18-30, which limits the

generalizability of the findings to other groups (Kuss & Griffiths, 2017). The cultural context represents both a limitation and a strength in terms of addressing a gap in the literature by focusing on a Greek-Cypriot sample. However, it may also limit the generalizability of the results to other cultural groups or settings, attitudes on social media use, and social media use itself. Emotional expression and attitudes toward mental health can vary across cultures, so the relationships observed in this study may not generalise to populations outside Cyprus or Greece (Keles et al., 2020). Lastly, resilience, despite showing a significant negative correlation with social media addiction, did not emerge as a significant predictor in the regression analysis. This highlights that the role of resilience is possibly indirect and more complex, influencing other variables such as anxiety and BPD indications. The present study did not test moderation effects or mediation, which limits the ability to fully explain how resilience operates within the model. It can only be speculated that it indirectly influences social media addiction by reducing anxiety and dysfunctional coping mechanisms or avoidance and promoting functional emotional regulation or coping mechanisms. Future research could explore these mechanisms in more depth using more advanced statistical approaches (Hu et al., 2015).

Future Research

In the future, when this subject is reevaluated, research should aim to build on the foundation laid and address the present study's conceptual and methodological limitations. One significant direction is using longitudinal research designs; the current study employed a cross-sectional design, which allowed checking the relationships between social media addiction, BPD traits, anxiety, and resilience. Using a longitudinal design, it is possible to check causal relationships. Longitudinal studies would allow researchers to examine how these psychological factors develop over time and whether, for example, increases in anxiety

or emotional instability precede the development of addictive social media use, or vice versa (Kuss & Griffiths, 2017). Additionally, another important area for future assessment concerns the examination of mediating and indirect pathways. The present study's findings suggested that resilience may operate indirectly in reducing social media usage by reducing anxiety levels and the likelihood of social media being used as a coping mechanism. Future research could test mediation models to identify whether anxiety mediates the relationship between social media addiction and resilience, information that would be consistent with theoretical frameworks such as the I-PACE model (Brand et al., 2016; Brand et al., 2019). The use of structural equation modelling or path analysis could provide a more detailed and specific understanding of how resilience, anxiety and social media addiction interact. Another direction for future research could be to further investigate BPD traits in non-clinical populations. The findings of the present study focused on indications and screening of BPD traits rather than diagnosed cases. The findings suggested that clinical traits appear and may play a significant role in dysfunctional or addictive social media use. Future research could explore specific BPD traits, such as fear of abandonment or emotional instability, as separate predictors of addictive social media behaviour. This would assist in clarifying which aspects or traits of borderline personality disorder are the strongest links to excessive social media use (Trull et al., 2011). An additional direction for future research could be cultural factors; the current study focused on a Greek-Cypriot sample. Studies in different cultural contexts would help identify whether these findings apply to other populations or whether there is a cultural factor influencing the results. A cross-cultural approach would reveal differences in social media use patterns, emotional expression, and coping strategies, which could influence the relationship between psychological factors and social media addiction (Kuss & Griffiths, 2017). In addition, future research could employ and use more representative and diverse samples. Using a convenience sample and self-report measures may have increased response

bias among university students and limited generalizability. Additionally, including clinical interviews, behavioural measures of social media use, or multi-informant data could improve the validity of the findings and reduce reliance on self-reported behaviour (Andreassen, 2015). Additionally, future research should improve gender inclusivity. Lastly, future research should investigate further gender-related mechanisms that may increase or reduce social media usage. While the present study identified some small but significant gender differences, future research could examine how gender influences or moderates the relationship between personality traits, anxiety, social media use and resilience. This approach may provide a more nuanced understanding of how social and psychological factors interact to influence problematic social media use (Marengo et al., 2022).

Conclusions

The present study aimed to examine the relationship between social media addiction and different psychological factors, specifically borderline personality traits, anxiety, and resilience. The sample consisted of young Greek-speaking adults aged 18–30 who were active social media users and based in Cyprus. Given the increased use and integration of social media into everyday life, as well as the growing concern surrounding problematic and addictive patterns of use, this research aimed to contribute to a clearer psychological understanding of why some individuals appear more prone and vulnerable to developing addictive patterns of social media use than others. By examining these variables both individually and in combination, the study aimed to move beyond single-factor explanations and provide a more comprehensive psychological perspective on social media addiction. Overall, the findings of the study indicate that social media addiction is more closely associated with personality-related factors and emotional vulnerability than being a purely behavioural addictive habit. Social media addiction was positively associated with anxiety and indications of borderline personality disorder, while being negatively associated with

resilience. Younger age was also related to higher levels of problematic social media use, anxiety, and borderline traits, further highlighting young adulthood as a period of increased vulnerability. Minor gender differences were observed, suggesting that gender may influence social media use patterns. Importantly, when these variables were examined together in a regression model, borderline personality traits emerged as the strongest independent predictor of increased social media addiction. Anxiety showed a meaningful association with social media addiction, but did not remain a significant predictor when other variables were controlled for. Resilience appeared to function indirectly, either by reducing anxiety or by promoting more adaptive coping mechanisms, which in turn may reduce social media addiction. Overall, these findings suggest that social media addiction is better understood as the result of several interacting psychological processes. Interpersonal vulnerability and emotional instability appear to play a central role, while anxiety contributes to emotional dysregulation, and resilience functions as an indirect protective factor by reducing emotional vulnerability. Taken together, the results support theoretical frameworks such as Griffiths' Components Model of Addiction (Griffiths, 2005) and the I-PACE model (Brand et al., 2016, 2019), which conceptualise addictive behaviours as arising from the interaction among personal vulnerabilities, emotional states, coping mechanisms, and reinforcing behavioural patterns. The present study contributes to the literature by highlighting the importance of examining multiple psychological factors simultaneously and by providing evidence from a Greek-Cypriot population. This area has been largely underrepresented in previous research. Overall, the findings suggest that problematic social media use in young adults should not be viewed merely as an issue of excessive screen time, but as a psychologically meaningful behaviour that may serve emotional and interpersonal functions. Understanding these underlying processes is essential for developing more effective prevention and intervention approaches in counselling psychology and related fields. In conclusion, understanding social

media addiction as an expression of emotional and interpersonal needs rather than a simple behavioural habit may allow counselling psychologists to respond with more effective, psychologically informed prevention and intervention approaches.

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