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An Examination of the Relationship Between Psychological Well-being, Social Media Usage, Self-Control, and Insomnia of Turkish University Students

Türkiye'de Üniversite Öğrencilerinde Psikolojik İyi Oluş ile Sosyal Medya Kullanımı, Öz-Kontrol ve Uykusuzluk Arasındaki İlişkinin İncelenmesi

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ABSTRACT: This study aims to examine the relationship students' social media use, insomnia, and self-control have with their psychological well-being. A total of 404 students (305 females and 99 males) participated in the research. The data have been collected using the Turkish versions of the Social Media Disorder Scale, Psychological Well-Being Scale, Brief Self-Control Scale, and Insomnia Severity Index. The relationship between variables were examined by Path Analysis. According to the results, the model shows that self-control significantly and directly increases psychological well-being, social media disorder increases insomnia, and insomnia decreases self-control. Social media disorder and insomnia significantly and indirectly predict psychological well-being through the mediation of self-control. The findings show psychological well-being to be affected by self-control, social media disorder, and insomnia.

Keywords: Psychological well-being, self-control, social media use, insomnia, university undergraduate students

ÖZ: Bu çalışmada üniversite öğrencilerinin psikolojik iyi oluşları ile sosyal medya kullanımları, uykusuzluk ve öz-kontrolleri arasındaki ilişkileri incelemek amaçlanmıştır. Araştırmaya 404 öğrenci katılmıştır (305 Kadın ve 99 erkek). Verilerin toplanmasında, Psikolojik İyi Oluş Ölçeği, Sosyal Medya Bozukluğu Ölçeği, Uykusuzluk Şiddeti İndeksi ve Kısa Öz-Kontrol Ölçeğinden yararlanılmıştır. Değişkenler arasındaki ilişkiler Yol Analizi ile incelenmiştir. Sonuçlara göre, oluşturulan model öz kontrolün psikolojik iyi oluşu anlamlı ölçüde ve doğrudan artırdığını, sosyal medya bozukluğunun uykusuzluğu artırdığını ve uykusuzluğun öz kontrolü azalttığını göstermiştir. Sosyal medya bozukluğu ve uykusuzluk psikolojik iyi oluşu öz kontrol aracılığı ile dolaylı ve anlamlı olarak yordamıştır. Bulgular, psikolojik iyi oluşun öz kontrol, sosyal medya bozukluğu ve uykusuzluktan etkilendiğini göstermiştir.

Anahtar kelimeler: Psikolojik iyi oluş, öz-kontrol**, s**osyal medya kullanımı, uykusuzluk, üniversite öğrencisi.

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University students' psychological well-being is an important area of research. A healthy lifestyle plays a protective role against risk behaviors in university students, whereas negative mental health may result in risk behaviors (Ma & Lai, 2018). The period in which university students find themselves is when they experience changes and new beginnings in social, personal, and academic areas. Psychological well-being is an important element in the process of dealing with the developmental and adaptation problems that occur in students' lives (Demirer & Erol, 2020).

A complicated concept, psychological well-being refers to the best possible psychological experience and functioning. It may be characterized as containing hedonic (enjoyment, pleasure) and eudaimonic (meaning, fulfillment) aspects as well as resilience (Gross & Muñoz, 1995; Ryan & Deci, 2001; Ryff, 1995). Ryff (1989) asserts that psychological well-being is composed of a number of different components. According to Ryff, who summarized the fundamental ideas linked to the positive side of human nature, the six dimensions of psychological well-being are autonomy, environmental mastery, personal advancement, positive interpersonal relationships, life aims, and self-acceptance. According to Keyes et al. (2002) each of these characteristics is connected to a range of issues that individuals may experience. For instance, a person who establishes trustworthy relationships, is aware of their abilities, potential, and limitations, accepts both their positive and negative qualities without judgment and possesses a clear understanding of what they are meant to do with their lives. The components of psychological well-being include a sense of balance regarding thoughts, emotions, and social interactions, which calls for the active participation of self-control mechanisms (Brown & Ryan, 2003; Feller et al., 2018).

People with high levels of psychological well-being have better physical and mental health as well as a higher quality of life (Keyes et al., 2010). Besides, people with high levels of well-being have greater immune systems, differentiate themselves more in the workplace, and build stronger bonds with others (Lyubomirsky et al., 2005). There are multiple factors associated with psychological well-being, including but not limited to social media disorder, insomnia, and self-control. These variables can have a significant impact on the relationship between them.

Young people and college students today use social media and play online games (Alonzo et al., 2021 Primack et al., 2017). Web-based platforms known as social media sites let users build public or private accounts, engage with other users, and establish connections within the network. (Boyd & Ellison, 2007). Social media has various benefits, including enhancing one's mood, engaging in social and political activities, alleviating feelings of loneliness, and more. However, overindulgence in these platforms can contribute to the development of social media disorders (Babacan, 2016). Empirical data show that obsessive social media use is an increasing mental health issue, especially among teenagers who use smartphones (Rooij & Schoenmakers, 2013).

While social media platforms have been shown to present opportunities for pleasant social contacts, some researchers have come to the conclusion that these platforms may be detrimental to those who are experiencing depressive symptoms (Bessière et al., 2010; Lin et al., 2016; Seabrook et al., 2016). According to research, youth who use social media frequently have greater rates of depression (Cunningham et

al., 2021; Demirci, 2019; Karadağ & Akçinar, 2019; Keles et al., 2020). When social media usage is unregulated or excessively frequent, it can result in the development of disorders or addiction (Baz, 2018; Caz & Bardakçı, 2019; Griffiths & Szabo, 2014; Kuss & Griffiths, 2011; Savcı & Aysan, 2017).

Social media disorder or addiction has no status in the latest version of the Diagnostic and Statistical Manual of Mental Disorders (Van den Eijnden et al., 2016). However, it is recognized as a behavioral addiction in the literature (Echeburúa & de Corral, 2010; Griffiths & Szabo, 2014; Van den Eijnden et al., 2016). It is postulated to cause symptoms similar to classical addictions. Individuals suffering from social media disorder may experience mood modification, salience, tolerance, withdrawal, and emotional symptoms (Van den Eijnden et al., 2016). Savcı et al. (2018) reported that social media addiction is also called social media disorder, excessive social media use, problematic social media use, and compulsive social media use.

The concept of self-control is defined as “the ability to override or alter one’s internal reactions, as well as to interrupt and avoid acting on undesirable behavioral tendencies (e.g., impulses)” (Tangney et al., 2004, p. 274). According to Rosenbaum (1993), there are three basic purposes for self-control behavior. The first is the restorative function, which aims to manage emotions like stress and anxiety that impair daily activities. Regeneration is the second purpose. Dieting makes it easier to adopt new, challenging behaviors like quitting smoking, along with behaviors like postponing gratification and resisting temptations. The third function is experiential self-control, which enables people to completely enjoy enjoyable activities.

Self-control is a crucial component of theoretical knowledge of the self and the ways in which it works (Baumeister et al., 2007). In the meantime, the practical applications of self-control have attracted study in many contexts. Various research findings have shown people to differ from one another in terms of their self-control abilities. Some people are far better at keeping their temper, keeping promises, holding back after a few drinks, saving money, persevering at work, and keeping secrets (i.e., managing their lives) compared to others. These differences also appear to have as much of an effect on their well-being and success in life (Bucak, 2021; Li et al., 2019; Tucaniou & Ebrahimabad, 2019). Research has demonstrated that people with strong self-control are psychologically compatible, self-accepting, and have high self-esteem. They are also effective in school, self-controlled and logical, and have positive interpersonal relationships. People with limited self-control tend to act without thinking, do what they want right away, struggle in school, act selfishly, prefer simple chores, engage in exciting and risky activities, act impulsively, and have a high risk of becoming addicted (Baumeister et al., 1994; Duyan et al., 2012; Kuzucu et al., 2015; Tangney et al., 2004; Vohs & Faber, 2007).

Another research concept is sleep, which has physiological, psychological, and social aspects that have a big impact on people's health and quality of life (Aktürk, 2013). Since sleep affects a person's quality of life and overall well-being, it is important for one's health (Aktürk, 2013; Aysan et al., 2014). The body heals and regenerates itself during sleep, stores energy, enhances memory, promotes somatic growth and development, boosts the immune system, and develops the brain (Nauts & Kroese, 2017; Pilcher et al., 2015; Sarı et al., 2015; Yavuz et al., 2019).

A sleep disorder known as insomnia is characterized by at least four weeks of daytime dysfunction, including trouble falling asleep, a propensity to wake up late, or the ability to fall asleep but an inability to maintain a sleep pattern (Cunnington et al., 2013). Although insomnia symptoms can appear at any point in life, they are more prevalent in early adulthood (American Psychiatric Association, 2013). In Turkey, 46% of university students had sleeplessness problems, according to Önal and Hisar (2018).

The Current Study

In order to successfully deal with the developmental and adaptation issues that arise in the lives of university students, psychological well-being is a crucial component. Therefore, one of the research interests has been to comprehend and identify the variables influencing students' psychological well-being. In order to give evidence for this claim, the current study examined how social media use, self-control, and insomnia are related to psychological well-being.

Social media disorder affects happiness and life satisfaction. Studies reveal that it is hazardous when used unconsciously because it can interfere with sleep, cause stress, and prevent someone from indulging in hobbies and exercise (Chen et al., 2020; Kross et al., 2013; Özdemir, 2019; Özgen, 2016; Yue et al., 2021). According to a study conducted with Turkish university students, four technological addictions, namely internet addiction, social media addiction, digital game addiction, and smartphone addiction, have a significant impact on social connectedness (Savcı & Aysan, 2017).

In terms of sleep issues, university students are at risk (Afandi et al., 2013; Aysan et al., 2014; Eyüboğlu et al., 2021; Orzech et al., 2011; Sarı et al., 2015). A successful functioning in terms of academic achievement, interpersonal interactions, and adjustment skills is also correlated with self-control and adequate sleep, according Pilcher et al. (2015). Consistent evidence suggests that having adequate sleep has a positive relationship with psychological well-being (Demirer & Erol, 2020; Zhai et al., 2018). Demirer and Erol's (2020) study discovered that university students with poorer psychological states frequently reported insomnia. Besides, the literature has suggested that self-control and sleep have a reciprocal relationship. People who lack self-control may find it difficult to regulate their sleep, while those who have insomnia may find it difficult to maintain self-control (Nauts & Kroese, 2017). On the other hand, there is growing evidence that self-control and psychological well-being are positively associated (Bowlin & Baer, 2012; Bucak, 2021). Besides, self-control and social media disorder (Ekşi et al., 2019; Kaşıkçı et al., 2021) or smartphone use (Kaymaz & Şakiroğlu, 2020) are related.

The goal of this study was to determine how social media use, self-control, and insomnia are related to students' psychological well-being. It is hypothesized that social media disorder will decrease the level of psychological well-being by increasing insomnia and decreasing self-control. In other words, self-control and insomnia may have a mediating role in the relationship between social media disorder and psychological well-being. The current research on this relationship pattern is intended to help create psycho-educational programs that will enhance students' psychological well-being.

Research Question: Does social media disorder directly or indirectly affect psychological well-being through the mediation of insomnia and self-control?

Method

Research Design

In this study, a correlational survey design was used to investigate the relationship between social media disorder, self-control, insomnia, and psychological well-being. The relationships were examined using path analysis. Path analysis is a multivariate statistical method that uses path diagrams to determine the direct and indirect effects of exogenous variables on endogenous variables (Gürbüz, 2019).

The most significant advantage of path analysis is the ability to measure the direct and indirect effects of one variable on another. The magnitudes of the direct and indirect effects can thus be compared, and the total effect can be calculated. This method is more useful for determining how much of the relationships are directly influenced by the indirect and tertiary variables (Oktay et al., 2012). Therefore, path analysis was chosen for this study.

Participants

The sample of this research consisted of 404 voluntary public and private university students in Istanbul, Turkey. Of the total, 305 (75.5%) were female, and 99 (24.5%) male students. The study group was reached by convenience sampling. Participants' ages ranged from 17 to 32, with their average age being 20.63 (SD = 2.27). Because public face-to-face interactions have been minimized during the COVID-19 outbreak, data were collected via Google Forms. The data were collected in November-December 2021. The demographic information of the participants is in Table 1.

Table 1

*Demographic Variables (*N = *404)*

Variable	Category	Frequency	Percent
Gender	Female	305	75.5%
	Male	99	24.5%
Age		*M* = 20.63	*SD* = 2.27
Faculty	Faculty of Letters	49	12.1%
	Faculty of Education	203	50.2%
	Faculty of Law	75	18.6%
	FEAS	23	5.7%
	Faculty of Theology	39	9.7%
	Faculty of Architecture	15	3.7%
Social Media Apps	Instagram	358	88.6%
	WhatsApp	272	67.3%
	Twitter	262	65%
	Snapchat	71	18.1%
	Pinterest	38	9.4%
	Facebook	30	7.4%
	TikTok	13	3.4%
	Other	129	32%
Social media Use Time (hours per day)	0-2	93	23%
	2-4	157	38.9%
	4-6	105	26%
	6-8	38	9.4%
	8-10	11	2.7%

Instruments

Psychological Well-Being Scale

Diener et al. (2010) developed the scale, and Telef (2013) adapted the scale to Turkish. The scale consists of eight items. 42% of the variance was explained in the scale with factor analysis. The factor loads of the scale items are between .54 and .76. Also, the goodness of fit values are at acceptable levels (RMSEA = .08, GFI = .96, NFI = .94, CFI = .95). For the reliability analysis, α = .80 and the test-retest result is r = .86 (Telef, 2013).

Social Media Disorder Scale

Van den Eijnden et al. (2016) developed the scale, and Savci et al. (2018) adapted it into Turkish. The scale consists of nine items and is one-dimensional. According to the factor analysis, 48% of the variance was explained. The scale has an internal consistency of α = .86 and an r = .83 for the criterion-related validity sample (Savci et al., 2018).

Brief Self-Control Scale

Tangney et al. (2004) developed the scale, and Nebioğlu et al. (2012) adapted it to Turkish. There are four normal and nine reverse-scored items on the scale. It is a two-factor scale, namely self-discipline and impulsivity. The internal consistency of the scale is α = .83. The internal consistency for the sub-dimensions is α = 0.81 for self-discipline and α = 0.87 for impulsivity (Nebioğlu et al., 2012).

Insomnia Severity Index

Bastien et al. (2001) developed the scale, and Boysan et al. (2010) performed the Turkish adaptation. The scale has seven questions. Items are scored between 0-4. The scale items respectively measure the features: difficulty transitioning to sleep, difficulty maintaining sleep, waking up very early, satisfaction with sleep patterns, impairments in daily functionality, awareness of sleep-related disturbances, and stress level caused by sleep problems (Boysan et al., 2010).

Data Analysis

In this study, descriptive statistics and structural equation modeling were used. The relationships between the variables were tested by path analysis. Path analysis was performed using structural equation modeling (SEM). First, multicollinearity and normality were examined to determine the suitability of the data for SEM analysis (Teo et al., 2013). Variance Inflation Factor values were below 10. This finding indicates that there is no multicollinearity in the data set (Kline, 2015). The normality of the data was calculated using skewness and kurtosis values. Skewness and kurtosis values ranging between +/- 2 are accepted for normal distribution (George & Mallery, 2009). The kurtosis values are between .88 and - 0.16 (social media disorder = .88, self-control = -0.16, insomnia = .43, psychological well-being = .22). The skewness values are between .95 and -0.08 (social media disorder = .95, self-control = -0.08, insomnia = .72, psychological well-being = -0.51). Thus, it was decided that the data were suitable for SEM analysis. The goodness of fit of the structural model was calculated with the $\chi 2/df$ ratio, RMSEA, SRMR, CFI, and NFI indices according to Kline's (2015)

recommendation. To support the significance of the direct and indirect effects of the variables in the structural model, a 95% confidence interval was chosen, and a Bootstrap analysis was performed through 50000 resamples (Preacher & Hayes, 2008). Data were analyzed via IBM SPSS and AMOS package program.

Ethical Procedures

The search was approved by the Ethics Committee of Istanbul 29 Mayıs University (Approval No: 2020/04-05).

Results

Descriptive Statistics and Correlation Analysis

The correlation coefficients between the variables and the findings of the descriptive statistics are in Table 2. The kurtosis values are between .88 and -0.16, and the skewness values are between .95 and -0.08. Cronbach's alpha values of the scales are above acceptable limits (α = .79, .80, .80 and .82). As can be seen from Table 2, all variables are significantly correlated; social media disorder and psychological well-being (r = -0.18, $p < .01$) and self-control (r = -0.38, p < .01) and with insomnia (r = .32, $p < .01$); self-control and psychological well-being (r = .45, $p < .01$) and insomnia (r = -0.30, $p < .01$); psychological well-being and insomnia (r = -0.21, $p < .01$).

Table 2

Descriptive Statistics and Correlation Matrix of the Variables

	Social Media Disorder (SMD)	Self-control	Insomnia	Psychological Well-Being (PWB)
Social Media Disorder	-	-0.38**	.32**	-0.18**
Self-control		-	-0.30**	.45**
Insomnia			-	-0.21**
M	18.73	43.64	9.65	42.11
SD	6.61	7.97	5.23	7.04
Skewness	.95	-0.08	.72	-0.51
Kurtosis	.88	-0.16	.43	.22
Cronbach Alpha	.82	.79	.80	.80

N = 404, **$p < .01$

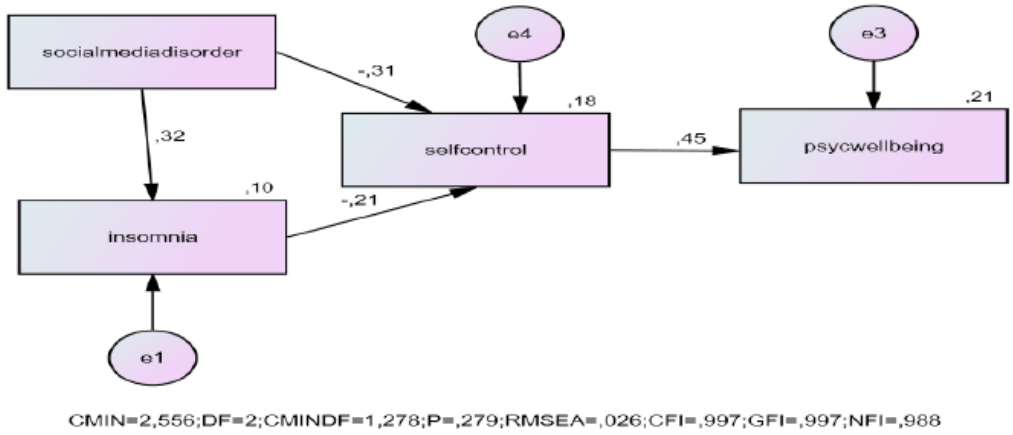
Path Analysis

According to Table 2, there are significant relationships between the variables. For this reason, a model was established to test the indirect and direct pathways from self-control, insomnia, and social media disorder variables to psychological well-being. In the first model, the partial mediating role of insomnia and self-control in the relationship between social media disorder and psychological well-being was tested. Direct and indirect path coefficients from social media disorder through insomnia and self-control to psychological well-being were examined. The tested model is not adequately fitted with the data, (χ^2 / df(2) = 18.2, $p = .00$), RMSEA = .20, CFI = .92, GFI = .97, NFI = .92. Additionally, there were no statistically significant direct path coefficient between social media disorder, insomnia and psychological well-being (respectively, β = .012, $p = .81$; β = -.077, $p = .10$). Therefore, a second model was established. Second, the modified model was tested using only indirect path coefficients

from social media disorder to psychological well-being via insomnia and self-control. The second model adequately fitted with the data, (χ^2 / df(2) = 1.29, p = .28), RMSEA = .026, CFI = .99, GFI = .99, AGFI = .98, NFI = .98, SRMR = .021 (Hu & Bentler, 1999; Kline, 2015; Şimşek, 2007). Therefore, the second model (the full mediating model) was preferred. These results generally showed that social media disorder indirectly predicted psychological well-being through insomnia and self-control. The standardized path coefficients of the established model are in Figure 1.

Figure 1

Standardized Path Coefficients for the Model



More than 5,000 resamples were used to test the significance of the coefficients showing the direct and indirect effects of the variables of self-control, insomnia, and social media disorder on psychological well-being. According to this analysis, social media disorder directly and significantly predicts insomnia (β = .32, p < .001, 95% CI [.165, .329]), and insomnia directly and significantly predicts self-control (β = -0.21, p < .001, 95% CI [-0.456, -0.163]. Social media disorder predicts self-control both directly (β = -0.31, p < .001, 95% CI [-0.486, -0.264]) and indirectly through the mediation of insomnia (β = -0.07, p < .001, 95% CI [-0.109, -0.032]). Self-control directly and significantly predicts psychological well-being (β = .45, p < .001, 95% CI = [.329, .473]). Social media disorder (β = -0.17, p < .001, 95% CI [-0.223, -0.123]) and insomnia (β = -0.09, p < .001, 95% CI [-0.143, -0.046]) indirectly and significantly predict psychological well-being through the mediation of self-control. These three variables explain 21% (R^2 = .21) of the variance of psychological well-being in the model. The findings regarding the standardized path coefficients are in Table 3.

Table 3

Estimated Parameters and 95%CIs for the SEM Paths

Direct Link			Estimate	95% CI [Lower, Upper]	*p*
Insomnia	<---	SMD	.315	.165, .329	.000
Self-Control	<---	Insomnia	-0.205	-0.456, -0.163	.000
Self-Control	<---	SMD	-0.312	-.486, -.264	.000
PWB	<---	Self-control	.454	.329, .473	.000
Indirect Link					

Self-Control	<---	Insomnia	<---	SMD	-0.065	-.109, -.032	.000
PWB	<---	Self-control	<---	SMD	-.171	-.223, -.123	.000
PWB	<---	Self-control	<---	Insomnia	-.093	-.143, -.046	.000

Discussion

In this study, the effect of social media disorder on the psychological well-being of university students was examined through insomnia and self-control variables. When observing the direct effects of the variables in the research, self-control predicts psychological well-being positively; social media disorder predicts insomnia positively, and self-control negatively. Insomnia also negatively predicts self-control. When examining the indirect effects of the variables in the research, social media disorder and insomnia negatively affected psychological well-being through self-control. In addition, it was found that social media disorder negatively affects self-control through insomnia.

The Relationships Between Social Media Usage, Insomnia, and Self-Control

Social media disorder predicted insomnia positively and self-control negatively and significantly. Insomnia predicted self-control negatively and significantly. These findings support the studies in the literature. The findings that social media disorder negatively predicted one's capacity for self-control are consistent with other studies (Ekşi et al., 2019; Kaşıkçı et al., 2021; Selçuk, 2019). Griffiths (2013) suggested that addiction can both influence and be influenced by self-control. Diker and Taşdelen (2017) discovered that spending more time than anticipated on social media causes obligations to be neglected and urgent tasks to be postponed. Indeed, Duyan et al. (2012) discovered that people with poor self-control are unable to postpone gratification and can, as a result, give in to a variety of addictions. Firat (2017) observed that Facebook use is typically higher in individuals with poor self-control.

It is only reasonable that the intense usage of social media would result in physical and emotional tiredness in people, affecting their ability to exercise self-control (Omay & Gür Omay, 2022). In fact, those who use social media excessively need to make more effort to manage their conduct, but they are less likely to do so; they frequently engage in thrilling and risky activities and may behave more impulsively.

Researchers have revealed a relationship for the excessive and uncontrolled use of social media with many sleep disorders (Afandi et al., 2013; Alonzo et al., 2021 Fossum et al., 2014 Scott & Woods, 2019; Wong et al., 2020). Afandi et al. (2013) determined the factors affecting university students' sleep quality and evaluated the effect of low-quality sleep on students' daily activities. According to the result, those who did not use social networks had better sleep quality than users. Lin et al.'s (2020) study on young people in Iran found that problematic social media use affects the presence of insomnia. Constant use of social media can activate the central and autonomic nervous systems, which can therefore lengthen the period between waking and falling asleep (Higuchi et al., 2005). The quality of sleep can be impacted by physical conditions like muscle soreness and headaches since prolonged social media use keeps a person inactive (Fossum et al., 2014). Therefore, using social media more frequently can result in insomnia.

The results are in line with those of earlier studies, which showed that insomnia negatively correlated with one's ability to exercise self-control (Christian & Ellis, 2011; Meldrum et al., 2015; Partin et al., 2022; Thacher, 2008; Zohar et al., 2005). A study

carried out by Thacher (2008) with college students found that insufficient sleep can lead to problems with self-control. Medical students who were sleep deprived in the study by Zohar et al. (2005) reported being unable to muster the mental energy required for self-control. Since sleep is a vital component of a complex physiological process that repairs the nervous system and promotes long-term health and well-being, it may assist in restoring the internal resources for self-control (Pilcher et al., 2015). However, lack of sleep can impair self-control and decrease one's capacity, leading one, for instance, to select easier activities (Engle-Friedman & Riela, 2004).

Insomnia and self-control have an intricate, reciprocal relationship. Lack of sleep impacts people's capacity to exercise self-control in a variety of ways, such as making it harder for them to give up smoking or eat unhealthy snacks. It is highly likely that individuals need to utilize compensatory regulation to maintain behavioral control since lack of sleep makes people physically more exhausted. Self-control depletion is not the same as being sleepy or physically exhausted; rather, it resembles mental exhaustion. Individuals' motivation to work harder is reduced by both mental exhaustion and a loss of self-control. As a result, they favor tasks that tend to require little planning and effort (Nauts & Kroese, 2017).

The Mediating Role of Self-Control

Social media disorder and insomnia indirectly predict psychological well-being through self-control. In other words, social media disorder and insomnia reduce Turkish students' psychological well-being by reducing their self-control. Psychological well-being was positively predicted by self-control. This conclusion is supported by studies (Bowlin & Baer, 2012; Bucak, 2021). According to the results from Bucak's (2021) research, self-control significantly and positively predicts university students' psychological well-being. Bowlin and Baer (2012) revealed mindfulness and self-control to positively predict well-being and negatively predict general distress in university students. Li et al.'s (2019) study with adolescents revealed a statistically significant positive relationship between self-control and the presence of meaning in life. The eudaimonic model of psychological well-being is known to also include meaning in life (Ryff, 1989). In addition, Tucaniou and Ebrahimabad's (2019) study conducted with soldiers found self-control to positively predict psychological well-being.

University students undergo a period of social, personal, and academic change and new beginnings. Psychological well-being is an important element in the process of students struggling with developmental and adaptation problems that occur in their lives. Students with high levels of self-control can regulate their thoughts, feelings, and actions in order to act in a way that is consistent with their goals and needs rather than with their impulses (Baumeister et al., 2006), and this was concluded to increase students' psychological well-being. Youths with high self-control are more successful academically (Tangney et al., 2004) and psychosocially (Finkenauer et al., 2005). Psychosocial and academic achievement can help young people improve their psychological well-being.

Self-control is a quality that can be improved and increased, which offers a significant chance to improve students' lives and psychological well-being. The development of self-control in young people is crucial. Making decisions, accepting

responsibility, starting or stopping a behavior, creating action plans, and carrying them out are some of the situations that call for self-control at this phase, which can be seen as a turning point in a person's life (Doğan, 2022). At this point, the present study's key finding is remarkable. It was discovered that problematic social media use and insomnia had a poor impact on self-control and that a lower level of self-control had a negative impact on students' psychological well-being. What does low psychological well-being mean? The sub-dimensions of psychological well-being can be used to provide an answer to this query. Ryff (1995) lists six qualities in this context, including self-acceptance, positive relationships with others, personal growth, life purpose, environmental dominance, and autonomy. As a result, when a person's psychological well-being is compromised, he or she is not satisfied with being himself, finds it difficult to build meaningful relationships, becomes bored with life, and adopts a pessimistic outlook. They may also lose faith in something that would otherwise give their lives purpose, has trouble managing daily problems, and finds it difficult to make a significant decision.

Limitations and Future Research

Several limitations should be considered in the current study. All the variables in the study (i.e., psychological well-being, social media disorder, insomnia, and self-control) have been assessed using self-report tools. Despite the tools used here having good psychometric support, self-report measures may be subject to bias. The study's methods involve correlational and cross-sectional methods. Experimental and longitudinal works would ensure further insight into the relationships between social media disorder, insomnia, self-control, and psychological well-being.

Studies on a wider range of variables are needed to clarify the possible links between insomnia, social media disorder, and self-control with the psychological well-being of university students. Exploring the complex dynamics between the structures underlying sleep and social media use and self-control can provide a valuable foundation for understanding how teens can improve their psychological well-being.

Implications

The research's findings may prove useful to professionals working in university counseling and guidance departments. To ensure psychological well-being, developmental interventions like development groups and psycho-educational programs can be incorporated. Self-control training exercises can be used in educational courses. Workshops can be organized to educate individuals on the appropriate and healthy use of social media. Experts in the field can again arrange lectures on the advantages of sound sleep. These educational studies may be distributed throughout secondary and high schools as well as university departments.

The study's findings are expected to be useful to other scholars who are interested in the topic. The new researchers might have more success identifying the cause-effect relationship between social media use, insomnia, self-control, and psychological well-being by basing their research on the experimental approach. By limiting students' use of harmful media, improving their sleep, and boosting their levels of self-control, it is anticipated that these regulations will have a favorable impact on their psychological well-being.

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