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RESEARCH ARTICLE

The Mediation of Emotion Regulation Strategies in the Relationship between Internet Addiction and Life Satisfaction during the COVID-19 Pandemic

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Background/purpose – The research aimed to examine the mediation of emotion regulation strategies in the relationship between Internet addiction and life satisfaction during the COVID-19 Pandemic.

Materials/methods – The participants consisted of 357 volunteers, aged 18 or over (257 females, 100 males), who were contacted online during 2021. The study used Young's Internet Addiction Test-Short Form, the Emotion Regulation Scale, and the Satisfaction with Life Scale as data collection instruments. The researchers employed descriptive statistics, the Pearson correlation coefficient, and mediation analysis to analyze the collected data.

Results – The findings of the research revealed a low-level negative ($r = -.23$, $p < .01$) significant relationship between Internet addiction and satisfaction with life. A low-level positive ($r = .20$, $p < .01$) significant relationship was established between Internet addiction and suppression, whilst no significant relationship was revealed between Internet addiction and reappraisal ($r = -.06$, $p > .05$). Based on the mediation analysis, the mediation of reappraisal in the relationship between Internet addiction and satisfaction with life was not shown to be statistically significant, whilst mediation of suppression was found to be statistically significant.

Conclusion – It was determined that the model examined in the study explained 11% of the total variance in life satisfaction. According to the results of the study, suppression was shown to be an important variable in the relationship between Internet addiction and life satisfaction. The study's findings were interpreted and discussed within the framework of the current literature, with various suggestions presented.

Keywords – Internet addiction, emotion regulation strategies, satisfaction with life, adults

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1. INTRODUCTION

Internet usage has become an important part of modern daily life, based on the developments in informatics and digital technology. The number of Internet users worldwide increased by 4%, with 192 million more users, from just January 2021 to January 2022. Including this increase, 62.6% of the world's populations use the Internet to some extent. In terms of daily average Internet use duration among individuals, the 16-64 year-old age group increased by 1% when compared to the same period in the previous year, with activity of up to 6 hours and 58 minutes per day. Also, it has been reported that 82% of the population in Turkey use the Internet, with a daily average usage of 8 hours (Kemp, 2022). These statistics demonstrate that the Internet is frequently used in Turkey; just as it is worldwide. The integral role of Internet usage in daily life and its increasing rate of usage raises the issue of Internet addiction. A large-scale study conducted in China with 20,472 participants during the COVID-19 pandemic found a general prevalence of Internet addiction of 36.7%, and severe Internet addiction of 2.8% (Li et al., 2021). In Lin's (2020) study, 24.4% of the participants were found to exhibit Internet addiction traits during the pandemic in Taiwan. Systematic reviews have shown that addictions such as Internet addiction and Internet-related online game addiction increased during the pandemic period; revealing the general levels of stress and psychological trauma experienced during the pandemic (Putra et al., 2023).

The literature contains a number of definitions for Internet addiction. Juneja and Sethi (2015) characterized Internet addiction as excessive, uncontrolled, and disruptive preoccupation with Internet usage, whilst Çakır et al. (2013) mentioned overusing potentials provided by various networks. The basic differences between a regular Internet user and an addict is where the use of the Internet has become excessive or beyond an individual's control; thus resulting in certain difficulties or disruption in daily life (Shaw & Black, 2008). Young (1999), a leading researcher on Internet addiction, examined the phenomena based on eight criteria and pointed out that individuals who met five of the eight criteria may be considered Internet addicts. Those criteria are overthinking and mental preoccupation with the Internet; feeling the need to use the Internet increasingly to achieve satisfaction; frequent failure to quit or decrease Internet usage; feeling distressed, annoyed, aggressive, or depressive when not using the Internet; staying online longer than planned; experiencing loss of opportunities in terms of important relationships, business, education, or career; lying to family members and others about the time spent online; and, using the Internet as a way to avoid problems or to decrease negative emotions (such as helplessness, guilt, anxiety, and depression). Griffiths (2000) stated that Internet use becomes significantly influential in the lives of addicts, and it is at this stage that changes occur in the individual's emotions, thoughts, and behaviors. When use of the Internet use is banned or withdrawn, individuals can exhibit certain emotional-behavioral responses such as anger and distress, and attempts to quit can repeatedly end in an addict's return to the Internet. Tao et al. (2010) emphasized the following symptoms of Internet addiction: Decreased interest and willingness towards activities other than the Internet, lying to others in order to use the Internet, and, for a 3-month minimum period, using the Internet more than 6 hours per day. Based on a report by We Are Social and Hootsuite (as cited by Kemp, 2022), worldwide average Internet usage has now exceeded the duration stated by Tao et al. (2010). From this perspective, it may be said that this increased use of the Internet places a greater number of individuals at risk of Internet addiction.

The enforced social isolation caused by COVID-19 and lifestyle changes such as quarantining at home are thought to have led to increased Internet use by individuals. For example, Awan et al. (2021) found that COVID-19 led to a serious increase in Internet use, which encouraged the use of pornography and also underlined the issue of Internet addiction. In another study, some of the participants stated experiencing difficulty controlling their Internet usage during the COVID-19 pandemic, which caused them various problems and negative emotions (Baltacı et al., 2021). In a study by Gecaite-Stonciene et al. (2021), 45.1% of participants were found to have increased Internet addiction during the pandemic. In addition, young adults with high levels of Internet addiction experienced high levels of anxiety and depressive symptoms. During the pandemic, adults with high levels of Internet addiction were reported to experience increased levels of loneliness, problematic usage of the Internet, sleeping difficulties, and higher psychosocial risk levels (Alheneidi et al., 2021; Deutrom et al., 2021; Öztürk & Ayaz Alkaya, 2021), as well as lower levels of life satisfaction and subjective wellbeing (Deutrom et al., 2021; Lin, 2020; Mahamid et al., 2021).

The tendency to overuse the Internet as a coping strategy for stress, anxiety, and depressive symptoms during the COVID-19 era occurred very frequently (Király et al., 2020). A person who dysregulates emotions due to addictive behaviors, or who is unable to regulate their emotions using appropriate strategies, may experience difficulties in relation to their mental health (Yang et al., 2020). In this context, it is important for individuals to be able to regulate negative emotions. Emotion regulation refers to the processes by which individuals experience emotions, when they experience them, how they experience them, how they talk about them, and what different emotions they may experience (Gross, 1998). Emotional regulation involves an individual's active effort to control the emotional states that they experience. Therefore, these efforts include the regulation of all types of emotional state, whether affectivity negative or positive (Koole, 2009). Emotions, as the basic structures in play for emotion regulation, influence an individual's adjustment and wellbeing (Greenberg, 2004, 2010). Emotion regulation may occur in the form of sustaining the emergence of an emotion or increasing its level, in addition to inhibiting the emergence or suppression of an emotion. Individuals have influence over the current structure of their emotions, namely, their consistence, duration, frequency, and the beginning and end of each emotional state, during the process of emotion regulation (Thompson, 1994). Gross (1999) explained the two basic emotion regulation strategies that individuals employ as reappraisal and suppression.

The *reappraisal strategy* asserts that emotions do not occur unexpectedly, and the emergence of emotions are based on the individual's reappraisal of their lives. Basically, emotion regulation occurs when individuals change their perspective of their lives and emotions. Through this reappraisal process, emotional responses may increase and/or decrease (Gross, 1999, 2002, 2015; Sheppes & Gross, 2012). Yue et al. (2022) stated that the reappraisal strategy may influence an individual's thoughts, their handling of emotional states or their perspective, and that this influence may further impact upon the emotions they experience. Thus, this strategy increases the possibility of an individual to experience positive emotions.

The *suppression strategy*, on the other hand, involves averting, or reducing the impact of an emotion, and the behavior that leads to the emotion that an individual experience. The crucial aspect here is for the individual who is using the suppression strategy, to make an effort to reduce the expression of the behavior. However, whilst this type of effort reduces the expression, it can increase their physiological response. Individuals employ this strategy to prevent their emotions from being externalized. However, this can reflect negatively upon the

individual's emotional state in relation to functionality, their interpersonal relationships, and their own wellbeing. Individuals who use the suppression strategy can become more vulnerable to negative affectivity. Therefore, reappraisal is often considered the more effective and functional strategy which leads individuals to a reduction in negative affectivity (Gross, 1999, 2002, 2015; Gross & Thompson, 2007; Sheppes & Gross, 2012).

Yıldız (2017) examined the relationships between emotion regulation and Internet addiction, and reported that external dysfunctional emotion regulation, internal dysfunctional emotion regulation, and internal functional emotion regulation predicted Internet addiction; explaining 38% of the variance. Zsido et al. (2021) stated that maladaptive emotion regulation strategies were found to be important factors in the emergence of problematic social media and smartphone usage in individuals from their study. According to Poormahdy et al. (2022), tobacco addiction can also increase with an effect on cognitive awareness for individuals who experience difficulty regulating their emotions. The literature has shown that positive relationships can exist between emotion regulation difficulties and Internet addiction (Salek Ebrahimi et al., 2019; Sertbaş et al., 2020). Other studies have suggested that emotion regulation strategies predict Internet addiction at a significant level, with a negative relationship between emotion regulation strategies and Internet addiction (Amendola et al., 2019; Amiri et al., 2015; Ateş & Sağar, 2021; Oktan, 2011; Trumello et al., 2018; Yang et al., 2020).

Another important variable associated with emotion regulation is life satisfaction, which involves an individual's positive self-judgement of their life and the extent to which they feel pleased with life. This judgement may relate to their overall life, but may also relate to specific domains in their life (Veenhoven, 1996). Individuals pursue various goals to achieve satisfaction in life, and these may include satisfaction sought through various activities, the expectation of success in relation to such goals, positive self-perception, leading a more meaningful life, and a consistent and adaptive mood (Neugarten et al., 1961).

Giangrasso et al. (2021) stated that it is important for individuals to feel valued and to have high levels of self-esteem in order to achieve satisfaction in life. Individuals who feel unvalued may have decreased life satisfaction due to experiencing depression, stress, or anxiety. Tudorel (2022) emphasized the importance of childhood, stating that negative childhood experiences can reduce life satisfaction during adulthood. Reduced satisfaction with life can lead to overuse of the Internet and of smartphones. Vujic and Szabo (2022) stated that perceived stress and life satisfaction are mutually associated with each other, and that these two variables impact upon individuals' smartphone addiction.

Deutrom et al. (2022) conducted a study during the pandemic in which it was asserted that individuals who experienced loneliness were less satisfied with life. The researchers stated having found a mediating relationship between Internet addiction and life satisfaction. In addition, it may be said that the negative effects experienced during the pandemic also negatively impacted on the level of life satisfaction, and that life satisfaction is important in protecting the emotional state and mental health of individuals (Tamarit et al., 2023). Koç (2017) revealed a negative relationship between Internet addiction and life satisfaction, and that negative emotions positively predicted Internet addiction. Additionally, some studies in the literature have remarked that Internet addiction significantly predicts life satisfaction (Ak, 2019; Bozoğlan et al., 2013; Lachmann et al., 2018; Peker et al., 2021; Shahnaz & Karim, 2014).

The literature has also divulged that emotion regulation has a positive relationship with self-esteem and happiness (Demirtaş, 2018), and a negative relationship with digital game addiction (Barut, 2019; Gürsoy, 2020). Emotion regulation has been shown to have a negative relationship with substance abuse (e.g., alcohol, drugs) and non-substance addictions (e.g., gambling, virtual games, problematic Internet use) (Estévez et al., 2017), depression, social anxiety (Dryman & Heimberg, 2018), and problematic smartphone use (Horwood & Anglim, 2021). According to Panayiotou et al. (2021), emotion regulation is positively related with life satisfaction.

A review of the relevant literature indicates that direct relationships exist between Internet addiction and life satisfaction. In addition, direct relationships have been found between emotion regulation and Internet addiction and life satisfaction. However, no mediation model has been applied in the literature that has examined relationships between the variables included together in the current study. In this sense, this research aims to address a significant gap in the literature.

The current study assumes that emotion regulation strategies mediate the relationship between Internet addiction and life satisfaction. The relationships targeted by the mediation model applied in this study aim to reveal whether or not individuals utilize Internet usage as an emotion regulation strategy, and how their life satisfaction is affected by that. On the other hand, considering that Internet usage increased during the pandemic period, it may be said that the basis for the development of addiction existed during that period. Additionally, intensive use of the Internet has the potential to affect individuals' life satisfaction. In other words, understanding the pathways leading to adult individuals' Internet addiction and life satisfaction may not only contribute to the literature on adults, but also provide important data of interest to mental health professionals. In addition, the current study may contribute to preventive and interventive efforts by psychological counseling experts, as well as those from clinical psychology and psychiatry as they actively support individuals with high levels of Internet addiction. Thus, the current study aims to examine the mediation of emotion regulation strategies in the relationship between Internet addiction and life satisfaction.

In this context, the following hypotheses will be tested in this study:

H1 *There is a direct significant relationship between Internet addiction and life satisfaction.*

H2 *There is a direct significant relationship between Internet addiction and emotion regulation and coping.*

H3 *There is a direct significant relationship between emotion regulation and coping and life satisfaction.*

H4 *Emotion regulation and coping mediate the relationship between Internet addiction and life satisfaction.*

2. METHODOLOGY

The research was formed as a cross-sectional study based on a descriptive method. The independent variable in the study is Internet addiction, with emotion regulation strategies as the mediating variables, life satisfaction as the dependent variable, and gender as the covariate variable.

Participants and Procedure

The study used a web-based cross-sectional research design. The data of the study were collected during the spring of 2021 through Google Forms created by the researchers. The study was conducted in accordance with the Helsinki accords, with informed consent obtained from each individual participant. Additionally, only those who participated voluntarily were included in the study. The consent form stated that the study had received approval from the research ethics committee of the university, and also that confidentiality regarding their responses was assured. The participants were informed that the data collected for the study would be used only within the scope of the current study and purely for scientific purposes.

The study's participants consisted of 357 volunteers aged 18 or over ($\overline{X}$ = 27.66; *SD* = 6.56), including 257 females (72%) and 100 males (28%) who were contacted online in 2021 using Google Forms. Only reachable and volunteer individuals were selected for the study, with convenience sampling used to select the study's participants. This sampling method allows researchers to easily reach the participants of a particular study (Cohen et al., 2007). Characteristics of the participants are presented in Table 1.

Table 1. Characteristics of Participants

Variable	Categories	*n*	%
Diagnosed as having or had COVID-19	Yes	60	16.8
	No	297	83.2
	Total	357	100
Loss of a relative due to COVID-19	Yes	91	25.5
	No	266	74.5
	Total	357	100
Quarantined due to COVID-19	Yes	74	20.7
	No	283	79.3
	Total	357	100
Internet connection at home	Yes	366	94.1
	No	21	5.9
	Total	357	100
Daily time spent using the Internet	12 hours or more	8	2.2
	6-12 hours	89	24.9
	4-6 hours	179	50.1
	1-3 hours	81	22.7
	Total	357	100

Instruments

Young's Internet Addiction Test-Short Form (YIAT-SF): Young (1998) developed the Young's Internet Addiction Test Form to determine Internet addiction levels in individuals, and which was later converted to its short form (YIAT-SF) by Pawlikowski et al. (2013). Kutlu et al. (2016) then adapted the scale to the Turkish language context. YIAT-SF is a single-dimension Likert-type scale consisting of 12 items, scored from 1 to 5. Exploratory factor analysis conducted by Kutlu et al. (2016) indicated that YAIT-SF explained 39.52% of the total variance for college students and 48.9% of the total variance for high-school adolescents. Based on the adaptive values obtained through confirmatory factor analysis for college students, χ^2 = 144.93, *SD* = 52, RMSEA = .07, RMR = .70, GFI = .93, AGFI = .90, CFI = .95, and

IFI = .91. The Cronbach's alpha coefficient for college students was revealed as .91 in reliability studies for the scale. Test-retest reliability for the scale using a 3-week interval was established as being .93.

Emotion Regulation Scale (ERS): Gross and John (2003) developed the ERS, and Eldeleklioğlu and Eroğlu (2015) later adapted the scale to the Turkish language context. Results of confirmatory factor analysis conducted for the scale's validity showed that χ^2/SD = 1.94, RMSEA = .046, GFI = .99, CFI = .98, and IFI = .91. The ERS consists of 10 items within two subdimensions, reappraisal and suppression. Examined separately, a study of the subdimensions' reliability revealed a Cronbach's alpha internal consistency coefficient of .73 for suppression and .78 for reappraisal. The scale's test-retest reliability was revealed to be .74 for reappraisal and .72 for suppression.

Satisfaction with Life Scale (SWLS): Diener et al. (1985) developed the SWLS to measure the levels of satisfaction that individuals experience in life. The SWLS was then adapted to the Turkish language context by Köker (1991). The SWLS is a 7-point, single-dimension, Likert-type scale consisting of five items, scored from 1 (*totally disagree*) to 7 (*totally agree*). Reliability studies of the scale showed the test-retest reliability as r = 85. In addition, the item-total correlation was reported to range between .71 and .80.

Data Analysis

In the analysis phase of the research, data collected through the Google Forms were entered into IBM's SPPS 22.0 program and organized accordingly. Afterwards, kurtosis and skewness values were examined in order to check the normality of the data. As a result, it was confirmed that the data had a normal distribution. In the next stage of the analysis, descriptive statistics of the data collected from the study group were examined. Pearson correlation analysis was used to examine relationships between the variables of the study. As the final stage, mediation analysis was then conducted, in which Multiple Mediation Model 4 was applied using PROCESS Macro software developed by Hayes (2022). With this software, the Bootstrap Method, which is based on resampling with replacement, was applied to the study's sample. Using Hayes' (2022) PROCESS Macro software, the indirect effects between the variables were determined by estimating the indirect effect for each dataset resampled with 5,000 bootstrap samples, and a specific indirect effect test performed in order to compare mediator variables in terms of power. In the model analyzed in this study, relations with parallel mediation were examined. The gender variable, with a potential to influence the relationships in the study, was set as the control (covariate) variable. IBM's SPSS 22.0 software was then used to analyze the data. The significance level for the study was set as .05.

3. RESULTS

Table 2 presents the descriptive statistics and correlation values associated with the study's variables.

Table 2. Descriptive Statistics and Correlation Values

Variable	1	2	3	4
1. Internet Addiction	---			
2. Reappraisal	-.06	---		
3. Suppression	.20**	.09	---	
4. Life Satisfaction	-.23**	.22**	-.13*	---
M	26.75	30.11	13.95	20.71
SD	8.75	6.54	5.40	6.79
Skewness	.51	-.44	.26	-.24
Kurtosis	-.15	.02	-.59	-.63

*$p < .05$, **$p < .01$, $N = 357$

Table 2 reveals that a positive significant relationship was found between Internet addiction and suppression ($r = .20$, $p < .01$) and between life satisfaction and reappraisal ($r = .22$, $p < .01$). A negative significant relationship was found between Internet addiction and life satisfaction ($r = -.23$, $p < .01$) and between life satisfaction and suppression ($r = -.13$, $p < .05$). No significant relationship was found between Internet addiction and reappraisal ($r = -.06$, $p > .05$) or between reappraisal and suppression ($r = .09$, $p > .05$). As can be seen in Table 2, skewness and kurtosis values between -1 and +1 were found, and all relevant values in the current study showed a normal distribution (Tabachnick & Fidell, 2013).

The multiple mediation of emotion regulation strategies in the relationships between Internet addiction and life satisfaction was tested, with gender then added as a control variable in the model. Figure 1 includes the findings of the statistical analysis conducted.

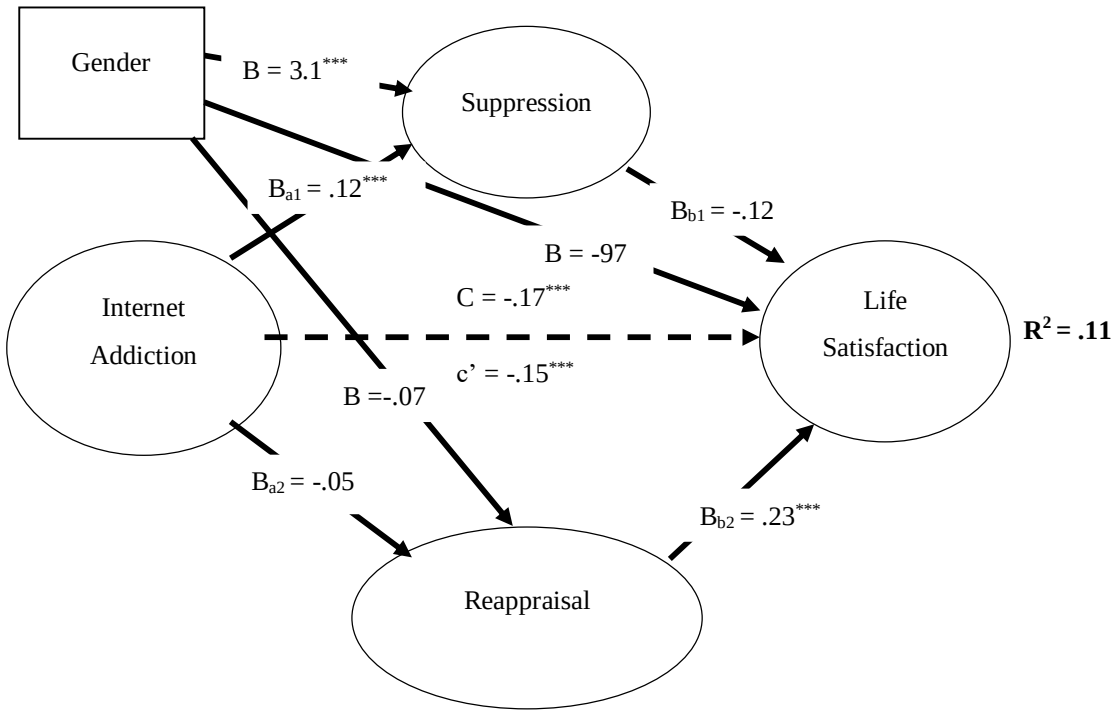

Figure 1. Multiple Mediation of Emotion Regulation Strategies in Relationship between Internet Addiction and Life Satisfaction and Non-Standardized Beta Coefficients (***$p < .001$)

Figure 1 indicates that the total effect of Internet addiction on life satisfaction was shown to be (c = -.17, SE = .04, t = -4.39, p < .001) negative at the level of significance. The direct effect of Internet addiction as a predicting variable on suppression (B = .12, SE = .03, t = 3.81, p < .01) as a mediating variable was significant, whilst its direct effect on reappraisal (B = -.05, SE = .04, t = -1.18, p > .05) was not found to be significant. The direct effect of the mediating variables on life satisfaction showed that reappraisal (B = .23, SH = .05, t = 4.39, p < .01) had a significant effect, whilst suppression strategy (B = -.12, SE = .07, t = -1.83, p > .05) had no significant effect on life satisfaction.

Gender did not significant affect life satisfaction or the participants' reappraisal; however, it did statistically and significantly affect their suppression levels (B = 3.1, SE = .60, t = 5.18, p < .001).

When Internet addiction and the mediating variables were both considered in the equation, the relationship between Internet addiction and life satisfaction was reduced, but the significance level remained the same (c' = -.15, SE = .04, t = -3.76, p < .001) in relation to direct effect. This result indicated that the mediating variables did mediate between Internet addiction and life satisfaction. In addition, the overall model was found to be significant ($F_{(4-352)}$ = 11.24, p < .001), and explained 11% of the total variance in life satisfaction.

Table 3. Comparison of Indirect Effects and Specific Indirect Effects of Internet Addiction on Life Satisfaction Through Emotion Regulation Strategies

Effects	Point Estimation	Product of coefficients			Bootstrap 95% BCa Confidence Interval	
		SH	z	*p*	Lower	Upper
Total Indirect Effect	-.0254	.0128			-.0517	-.0013
Reappraisal	-.0108	.0102	-1,1143	.2652	-.0333	.0077
Suppression	-.0145	.0090	-1,6061	.1082	-.0369	-.0001
Comparisons						
C1	.0037	.0144			-.0226	.0339

N = 357, k = 5,000, * p < .05, ** p < .01, *** p < .001
Control variable = Gender, BCa = Bias corrected, accelerated 5,000 bootstrap sample

The researchers used 5,000 bootstrap samples to determine the statistical significance of indirect and specific indirect effects in the model examined in this research. The data obtained in the bootstrap confidence interval were considered when finding the significance of total and indirect effects in the mediation analysis (Hayes, 2022). In this study, the estimates were corrected within the 95% confidence interval with the upper and the lower confidence bounds considered and bias error removed; the results of which are presented in Table 3. The total indirect effect (difference between total and direct effect/ c-c') of Internet addiction on life satisfaction through the mediation of emotion regulation strategies can be seen in Table 3 (point estimate = -.0254 and 95% BCa CI [-.0517, -.0013]). The analysis results of each mediator in the studied model indicate that the mediation of reappraisal strategy (point estimate = -.0108 and 95% BCa CI [-.0333, .0777]) was not statistically significant and

that suppression strategy was a statistically significant mediator (point estimate = -.0145 and 95% BCa CI [-.0369, -.0001]).

4. DISCUSSION

The study examined the mediation of reappraisal and suppression as emotion regulation strategies in the relationship between Internet addiction and life satisfaction. The findings revealed that only the mediation of suppression as an emotion regulation strategy was significant in the relationship between Internet addiction and life satisfaction. Based on this result, it may be said that as Internet addiction levels in individuals increase, their life satisfaction levels are reduced through suppression as an emotion regulation strategy.

The literature suggests that people avoid problems by focusing on the Internet, and even use the Internet as a means to regulate the moods and emotions that they actually experience; consequently, those with Internet addiction are unable to sufficiently regulate their emotions (Juneja & Sethi, 2015; Kuss & Griffiths, 2014). This phenomenon, described as mood shift, is among the identification criteria of Internet addiction (Beard & Wolf, 2001; Griffiths, 1996; Ko et al., 2005; Tao et al., 2010; Young, 1998). Individuals are known to use the Internet to alleviate negative mental states such as anxiety and stress or to mitigate their effects (Király et al., 2020). In addition, compared with healthier individuals, those with higher levels of Internet addiction use the reappraisal strategy less and depend more on suppression strategy (Yan et al., 2021). As a result, such individuals are seemingly less happy and satisfied with their lives (Cameron & Overall, 2018; Gross, 2015; Gross & John, 2003; Longstreet & Brooks, 2017; Longstreet et al., 2019; Sheppes & Gross, 2012).

Individuals can achieve a sense of immediate relief or contentment by suppressing feelings associated with their daily troubles and stress through the use of smartphones that provide Internet access and a vast array of useful and interesting, engaging applications; however, this feeling or sense of happiness is only temporary (Shi et al., 2023). Individuals who suppresses their emotions and thereby obtain immediate benefit from their smartphone usage may experience difficulty in achieving life satisfaction, which is a multidimensional structure. Ng et al. (2018) stated that individuals who face challenging incidents in life use suppression as an emotion regulation strategy more, although this effect can in turn reduce their satisfaction with life. Cameron and Overall's (2018) study found that individuals who employed suppression strategy had higher levels of stress, felt less valued, and were less satisfied with life.

The results of research conducted on addictions such as alcohol and substances have also emphasized a positive relationship between addiction and escapism, and that as levels of addiction increase, the drive for escape also increases. While addiction may cause individuals to seek an escape from personal awareness, such an approach can also negatively impact on their life satisfaction (Jouhki & Oksanen, 2022). This was similarly seen in the results of the current study, whereby individuals with higher levels of Internet addiction appeared to waste a significant part of their time each day surfing the Internet and lowering their life satisfaction instead of facing their life problems and solving them or regulating their emotions through reappraisal of the situation. The risks that individuals perceived during the COVID-19 pandemic may also have directed them towards extensive use of the Internet. Quarantine practices, avoiding social interaction (particularly during the early phase of the pandemic), and moving business and education to operating on virtual platforms also helped facilitate this process. With this intense use of the Internet, individuals would likely endanger their

happiness by avoiding realistic negative emotions created by the pandemic and from suppression of those emotions (Pan et al., 2022). As the current research results indicate, Internet addiction is thought to result in or increase the use of suppression as an emotion regulation strategy. It may be stated that, particularly during the pandemic, individuals focused more on using the Internet as a means to coping with the lockdowns and the anxiety associated with the contagion, and thereby regulated their emotions through active suppression.

According to Gross (2007), suppression is not a strategy limited solely to emotions; suppression of thought is also a strategy employed in fighting addictions. Addicts attempt to control their desires through suppression of their thoughts. Playing games, watching pornography, films, or through similar activities, individuals may be trying to preserve and sustain their wellbeing. Aldao et al. (2010) stated that individuals may opt to regulate their emotions through eating, drinking, or substance use; therefore, those same individuals may less frequently employ effective emotion regulation strategies. Since individuals can regulate their emotions by focusing on their use of the Internet, in addition to eating, alcohol consumption, and substance use, Internet addicts may avoid employing the reappraisal strategy. Individuals may also use suppression as a distraction technique. Instead of reappraising painful or negative situations, suppression may be employed as a seemingly easier strategy than flight or avoidance. A meta-analysis study by Aldao et al. (2010) pointed out that suppression as an emotion regulation strategy is associated with negative mental states.

Gross and Levenson (1993) stated that suppression strategy aims to prevent the external expression of emotions. Individuals who engage in suppression as an effective strategy to restrict external expression (Gross, 2002) experience more negative emotions, although this leads to them feeling worse and fails to bring about an improvement to their psychological wellbeing (Gross, 2002; John & Brüt, 2004). While suppression strategies used by individuals during the COVID-19 era may be characterized by attempts to ignore concerns about the pandemic, this may have resulted in creating problems prior to sleep or in other areas of life. As a result, this may have reduced their level of life satisfaction along with an increase seen in psychological problems (Brenning et al., 2023). According to Bulut and Bulut Serin (2016), experiencing more negative than positive emotions reduces life satisfaction. Additionally, Veenhoven (1988) mentioned the importance of a positive mood in the context of life satisfaction, stating that a positive mood was an important determinant to increased life satisfaction.

Also, in the relationship between Internet addiction and life satisfaction, the mediation of reappraisal was not found to be statistically significant in the current study. Based on a review of the relevant literature, it may be stated that Internet addiction is associated with the reappraisal subdimension of emotion regulation, and that Internet addicts make less use of the reappraisal strategy (Fuladvand, 2021; Liang et al., 2021; Trumello et al., 2018; Yan et al., 2021). Reappraisal means that individuals' emotions do not suddenly occur on their own and the emergence of emotions depends on their appraisal of past experiences. Basically, emotion regulation happens through a change of perspectives towards an individuals' experiences and emotions (Gross, 1999, 2002 2015; Sheppes & Gross, 2012). Gross and Thompson (2007) argued that emotion regulation skills are goal-directed and that positive and functional skills such as reappraisal may not work if they are not goal-directed. For Internet addicts, the priority is maintaining access to the Internet; based on the entertaining nature of the Internet, an individual uses it to facilitate changes in their mood (Kuss &

Griffiths, 2014). In addition, an Internet addict may experience anger and distress should they be blocked or unable to access the Internet; and those emotions are regulated by achieving access rather than through reappraisal (Bağatarhan, 2020). While meta-analysis studies have revealed inconsistent results between digital addictions such as problematic smartphone use and reevaluation, they emphasize that reevaluation is not an easy process to undertake and that it may take some time (Shahidin et al., 2022). Consequently, an Internet addict, with a mood that addiction brings about or one that leads to such an addiction, may not primarily see the need to reappraise or regulate their emotions, and therefore may not attempt to make use of their reappraisal skills.

The current study found a positive and significant relationship between life satisfaction, the dependent variable of the research, and reappraisal. Studies in the relevant literature also support this finding (Esmaeilinasab et al., 2016; Jiang et al., 2022; Teixeira et al., 2014; Toh & Yang, 2020). Satisfaction with life involves an individual's appraisal of their life in the affective and cognitive domains (Veenhoven, 1996). An individual's emotions do not suddenly appear of their own accord, but develop as an individual evaluates their own experiences. In the process of reappraisal, an individual changes their perspective based on their own experiences and/or emotions (Gross, 1999, 2002, 2015; Sheppes & Gross, 2012). Reappraisal strategy therefore serves as a preventive and preservative function in relation to mental health; and is also considered necessary to alleviate negative effects and for positive mental health (Hu et al., 2014; Trumello et al., 2018; Yang et al., 2020). An individual who is otherwise satisfied with life may be thought to have positive mental health from a positive appraisal. According to Jiang et al. (2021), the skill of reappraisal brings about positive emotions and an emotional response, and this increases an individual's subjective wellbeing. Reappraisal therefore has a positive relationship with life satisfaction. However, the current study revealed that no significant relationship was found between Internet addiction and employment of the reappraisal skill, and reappraisal was not found to mediate between Internet addiction and life satisfaction.

Aldao et al. (2010) stated that reappraisal ability has a minimal or moderate effect in relation to mental disorders. They emphasized that, when compared with the other emotion regulation strategies, reappraisal skill has a lesser association with mental disorders and the strategy used in this relationship, and that the type of mental disorder may therefore be a significant factor.

A review of the relevant literature suggests that various skills including avoidance, acknowledgement, rumination, problem solving, internal-functional, internal-dysfunctional, external-functional, and external-dysfunctional emotion regulation strategies in addition to suppression and reappraisal may be employed (Aldao et al., 2010; Yıldız & Kızıldağ, 2018).

5. CONCLUSION

The findings of the current study revealed that the mediation of suppression as an emotion regulation strategy in the relationship between Internet addiction and life satisfaction was significant, and that reappraisal as an emotion regulation strategy did not mediate in this relationship. The suppression strategy, with significant mediation as revealed in the current study, is expected to contribute to preventive and interventive efforts by mental health experts in order to reduce Internet addiction in individuals and to help support the life satisfaction of those they treat. The findings of the current study are also expected to have

contributed to the research literature in terms of longitudinal studies and similar processes that involve various groups.

It is thought that the results of the current study, which aimed to better understand the mental states of individuals in a period when society was experiencing challenging processes and changes in daily human life, and to make important and new contributions to the literature. In addition, it may be said that the study will help shed light on emotion regulation for future studies regarding adults who use the Internet extensively, and may thereby also contribute to future literature published on this subject. On the other hand, studies in the literature have generally examined the relationships between the variables of the current study in a direct form. As such, the current study, in examining the relationships between variables through parallel multiple mediation, is thought to add an innovative angle to the current literature.

6. LIMITATIONS AND SUGGESTIONS

Like most studies, the current research presents certain limitations. First, the participants were mostly female, so this attribute should be considered when attempting to draw generalizations from the findings. However, as the study group consisted of adults, the study's results may be generalized to similar groups. The second limitation concerns the instruments used in the study, since they relied upon self-reporting which provided data limited to a cross-sectional timeframe. Another limitation was whether or not the participants had any diagnosed, or undiagnosed, psychopathological clinical conditions unknown to the researchers. The current research was conducted during the era of the COVID-19 pandemic, and it must therefore be taken into consideration that quarantine and isolation practices may have significantly impacted the individuals' habits such as their Internet usage. Based on the results of the current study, it may be stated that Internet addiction increases the use of suppression as an emotion regulation strategy, and that this may reduce life satisfaction in individuals. Thus, research on the reduction and prevention of Internet addiction may be recommended, in addition to one-on-one and group psychological counseling or psychoeducational programs about individuals' functional emotional regulation. Lastly, longitudinal studies on the effects of emotion regulation may also be recommended for future research.

DECLARATIONS

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