



Research Article

Spiritual Well-being as a Mediator between Internet Addiction and Alienation

İbrahim Taş¹ 
Sakarya University

¹ Sakarya University, Faculty of Humanities and Social Sciences Kemalpaşa, Serdivan, Sakarya/TURKEY.
E-mail: ibrahimtas34@gmail.com

Abstract

One of the negative effects of Internet addiction on individuals' personal and social life is alienation. Spiritual well-being affects both Internet addiction and the level of alienation. The present study investigated the mediator effect of spiritual well-being in the relationship between Internet addiction and alienation. The study was conducted with 320 college students: 183 (57.2%) female and 137 (42.8%) male. The ages of participants ranged from 19 to 35, and the mean age was 20.74. Data were collected using a personal information form, an Internet addiction scale, an alienation scale, and a spiritual well-being scale. The analyses showed that Internet addiction, alienation, and spiritual well-being were significantly correlated. Internet addiction significantly predicted alienation and spiritual well-being. Spiritual well-being significantly predicted alienation. It was found that spiritual well-being partially mediated (indirect effect = .1525) the relationship between Internet addiction and alienation. The results show that when spiritual well-being increases, alienation decreases.

Keywords:

Internet addiction • alienation • spiritual well-being • mediation

İnternet Bağımlılığı ile Yabancılaşma Arasındaki İlişkide Aracı Değişken Olarak Spiritüel İyi Oluş

Öz

İnternet bağımlılığının bireyin kişisel ve sosyal hayatı üzerindeki olumsuz etkilerinden biri de yabancılaşmadır. Spiritüel iyi oluş hem internet bağımlılığı hem de yabancılaşma düzeyi üzerinde etkilidir. Bu çalışmada, internet bağımlılığı ile yabancılaşma arasındaki ilişkide spiritüel iyi oluşun etkisi araştırılmıştır. Çalışma 183'ü (%57.2) kadın, 137'si (%42.8) erkek olmak üzere 320 üniversite öğrencisi üzerinde yapılmıştır. Katılımcıların yaşları 19-35 arasında değişmekte olup, yaş ortalamaları 20.74'tür. Veriler kişisel bilgi formu, internet bağımlılığı ölçeği, yabancılaşma ölçeği ve spiritüel iyi oluş ölçeği kullanılarak toplanmıştır. Analiz sonuçları internet bağımlılığı ile yabancılaşma ve spiritüel iyi oluş arasında anlamlı ilişkiler olduğu göstermiştir. İnternet bağımlılığı yabancılaşma ve spiritüel iyi oluşu anlamlı bir şekilde yordamaktadır. Spiritüel iyi oluş yabancılaşmayı anlamlı bir şekilde yordamaktadır. Spiritüel iyi oluşun internet bağımlılığı ile yabancılaşma arasındaki ilişkide kısmi aracılık yaptığı bulunmuştur (dolaylı etki= .1525). Sonuçları spiritüel iyi oluş arttığında yabancılaşmanın azaldığını göstermektedir.

Anahtar Kelimeler:

İnternet bağımlılığı • yabancılaşma • spiritüel iyi oluş • aracılık

Corresponding author:
İbrahim Taş
E-mail:
ibrahimtas34@gmail.com

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Internet addiction covers a wide range of maladaptive behaviors, such as cyber relationship addiction, cyber-sex addiction, compulsive gambling, information overload, and online shopping (Craparo, 2011). Internet addiction has been affecting people more and more as humanity moves toward a more technological world and depending on the intense use of the Internet, which has increased dramatically in terms of all aspects of life with the COVID-19 pandemic process (e.g., Tanhan, 2020; Tanhan et al., 2021). By June 2022, 69% of the world population used the Internet. There was a 1416% increase in Internet use between 2000 and 2022 (Internetworldstats.com, 2022). The rate of Internet use in Turkish households was 94.1%, and the use of the Internet between the ages of 16 and 34 was 96% (TSI, 2022). Internet use is quite high in the 16-34 age group. Overuse of the Internet can cause problems, such as struggles with time management, health problems, deterioration in relationships, and preventing the fulfillment of daily responsibilities (Chou & Hsiao, 2000).

Different factors are effective in the intense use of the Internet. The reasons for the serious increase in Internet use can be listed as it's becoming an increasingly unrivaled tool for research, entertainment, and communication (Ko et al., 2012). It makes life easier and is accessible almost everywhere (Yen et al., 2009). The Internet also provides a space for people to express themselves as they prefer, creates a safe environment for expressing secret feelings, and provides a means for escaping negative feelings (Young, 1997).

Internet addiction is an impulse control disorder not involving intoxication (Young (1999). Internet addiction is characterized by symptoms such as constant preoccupation with the Internet, loss of control over Internet use, lying about Internet use or hiding time spent online psychological withdrawal, and continuing use despite negative consequences (Young, 2007).

Internet addiction is negatively associated with spiritual well-being (Ahmadi et al., 2018), psychological resilience (Robertson et al., 2018), and self-concept clarity (Israelashvili et al., 2012), and positively associated with alienation (Dargahi & Razavi, 2007; Li et al., 2010), depression, anxiety, stress and loneliness (Ostovar et al., 2016; Younes et al., 2016).

This study examines the mediating effect of spiritual well-being on the relationship between Internet addiction and alienation among college students. In order to remove or minimize the negative effects of Internet addiction, it is important to show the variables that are positively and negatively associated with Internet addiction. It is important to examine the variables that affect Internet addiction and the ones Internet addiction affects. In this study, first of all, the concept of alienation, which is affected by Internet addiction, will be discussed. Then, spiritual well-being, which affects both variables, will be discussed.

Alienation

Alienation is a state in which something or someone is distanced from another thing or person, and its functional or semantic sharing with another thing or person is terminated (Cevizci, 1999). The concept of alienation was originally used to refer to insanity. The words “aliéné” in French and “alienado” in Spanish were used to describe psychotic individuals. However, in the 20th century, the concept evolved to refer to the alienation of the individual self within society (Fromm, 2008). Hegel and then Marx began to use the concept to mean dehumanization. Recently, alienation has also been used to refer to an individual’s loss of independence, getting away from people, and from one’s own nature (Kaufmann, 1980). With this meaning, the concept of alienation has become a subject of psychology as much as philosophy.

Seeman (1959) defines alienation as having five components. The first is *weakness*. Weakness refers to the individual’s loss of control over the conditions that affect her/his life. Another component is *meaninglessness*, which refers to actions having no meaning or purpose and disconnection between one’s actions and goals. The third component *anomie* refers to how social norms have lost their meaning for the individual, and the individuals show behaviors not approved by social norms in order to reach their goals. The fourth component is *isolation*, which refers to the isolation that occurs when individuals reject social values and goals. The last component is the *individual’s self-alienation*, which refers to when an individual’s behavior becomes a tool for the satisfaction of others rather than for herself/himself.

Dean (1961) discusses three forms of alienation: weakness, anomie, and social isolation. *Weakness* is an individual’s effort outside of her/his purpose by focusing on areas not related with her/his own life. *Anomie* refers to an individual’s conflict with social norms by experiencing feelings of anxiety and meaninglessness against group norms. *Social isolation* is when an individual withdraws from social relationships and isolates herself/himself from group norms.

According to Fromm (2008), an individual who is disconnected from her/his inner world is an alienated individual. The alienated individual has lost her/his sense of self. The sense of self arises from the individual seeing herself/himself as the subject of her/his experiences, thoughts, feelings, decisions, judgments, and actions. The alienated individual, on the other hand, sees not herself/himself but others, and society as the subject of life. She/He cannot go beyond the general judgments of society. The alienated individual, on the other hand, sees not herself/himself but others, and society as the subject of life. This makes her/his insecure, unhappy, restless, and distressed. The alienated individual is unhappy, she/he tries to cover her/his unhappiness with entertainment consumption. According to Fromm (2008), the alienated individual uses most of her/his energy to stabilize or hide her/his uneasiness.

With the introduction of the Internet, feelings, thoughts, and habits began to change. Virtual life, virtual behavior, and virtual cultures emerged. Virtual worlds began to create new identities. The real and virtual identity of the individual began to intertwine, causing the individual to be alienated from herself/himself (Karagülle & Çaycı, 2014). A relationship has been observed between pathological Internet use and presenting oneself with a different identity in the virtual world (Çetin & Ceyhan, 2014). Internet addiction is associated with alienation because it is a pathological condition that prevents the individual from being herself/himself by imposing the new norms of the virtual world on the individual and deactivating the will of the individual.

A positive relationship has been found between negative use of technology and alienation (Babaođlan et al., 2016), Internet addiction and alienation (Li et al., 2010), social exclusion (Poon, 2018; Tas & Öztosun, 2018), isolation (Shaw & Black, 2008; Davis, 2001), and social isolation and daily Internet use (Müezzin, 2017). Based on the observed relationship between Internet addiction and alienation, we suggest that decreasing Internet addiction will have an effect on decreasing the level of alienation.

Spiritual Well-being

Spirituality has gained great attention in the last decades in different disciplines including mental health (Tanhan & Young, 2021). Spirituality, which comes from the Latin origin *spiritus*, means breath and life. The concepts of spirituality and religion are often confused (Hill et al., 2000): while religion was used in a broad sense including spirituality in the 1960s and 1970s, it has since come to be seen as separate from religion and religious practices (Peterman et al., 2002). Although spirituality is closer to religiosity than any other social concept, it is a concept different from religiosity (Moberg & Brussek, 1978). Authenticity and naturalness are key concepts of spirituality (Helminiak, 2001). From this definition, psychotherapists can distinguish spirituality from a belief in God or from institutionalized religions and theistic expressions, as including respect, nurture, and getting beyond institutionalization (Helminiak, 2001; Tanhan, 2019).

Spirituality has been at the center of thousand-year-old grounded practices and traditions, as well as more recent modalities of mental health treatment, including acceptance and commitment therapy (Tanhan, 2019). An individual without spirituality will be perceived as an incomplete individual (O'Brien, 1982). Spirituality can be defined as an individual's seeking for meaning in life and living life in line with this meaning (Rohde et al., 2017).

Spirituality has two dimensions. The vertical dimension includes the individual's relationship with a transcendent power (God) and system of values. The horizontal

dimension, on the other hand, includes the relationship of the individual with self, others, and the environment (Ross, 1995). Transcendence, referring to the dimension of awareness and experience beyond being physical, is a human need. Transcendence expresses the feeling of well-being an individual experiences when she/he finds a goal to which she/he can devote herself/himself (Ellison, 1983).

Spiritual well-being has been defined as the willingness to seek meaning and purpose in the existence of human beings (Opatz, 1986). It has also been defined as a situation that expresses an identity, feeling of integrity, and positive feelings, behaviors, and cognitions that provide satisfaction, beauty, joy, love, respect, positive attitude, inner peace, harmony, and direction (Gomez & Fisher, 2003). Spiritual well-being is evaluated not as a goal that can be achieved or reached at once, but as a search that continues for a lifetime (Moberg, 1984).

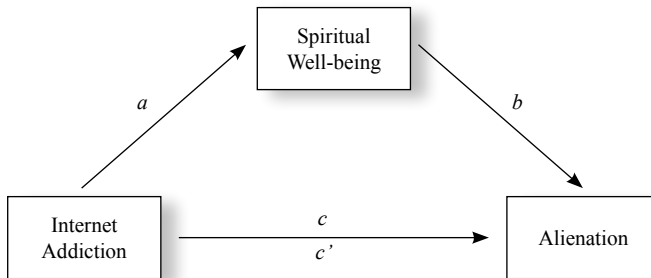
Spiritual well-being is positively associated with well-being, being extraverted, happiness (Gomez & Fisher, 2003; Tanhan & Francisco, 2019), quality of life (Allahbakhshian et al., 2010; Tanhan & Strack, 2020), the spirit to fight, level of income and fatalism (Cotton et al., 1999) and sense of coherence and coping styles (Unterrainer et al., 2014). And it is negatively associated with neuroticism, psychoticism (Gomez & Fisher, 2003), the desire to die quickly, despair and suicidal thoughts (McClain et al., 2003), desperation (Cotton et al., 1999), symptoms of mental illness (Unterrainer et al., 2014), and depression (Bekelman et al., 2007; Fehring et al., 1987).

According to Internet addiction criteria (Griffiths, 2005; Young, 2007), an individual with Internet addiction loses control over Internet use. She/He is now a directed one. She/He continues to use the Internet even though she/he does not want to, and shows withdrawal symptoms when she/he stops using the Internet. The addicted individual does not face her/his feelings, runs away from her/his feelings, and takes refuge in the virtual world to cope with the negative emotions she/he cannot cope with. In this respect, it can be said that Internet addiction is related to the psychological dimension of alienation expressed by Fromm (2008) and will deepen the alienation even more.

In addition, Internet-addicted individuals conflict with other people due to their use of the Internet and therefore experience problems in social relations. The most important activity in the lives of these people is the Internet. In this respect, it can be said that Internet addiction is related to the dimensions of alienation, powerlessness, and social isolation, which is the subject of this study and expressed by Dean (1961.) In this context, it can be said that Internet addiction is effective on alienation. Spirituality is a motivating and adaptive power (Ekşi & Kardaş, 2017). An individual with spiritual well-being seeks harmony between her/his inner world and the outer world (Opatz, 1986). It can be said that spiritual well-being is negatively related to

both Internet addiction and alienation. It can be said that increasing spiritual well-being will reduce the direct effect of Internet addiction, which is seen as a mental health problem (Karacic & Oreskovic, 2017; Xiuqin et al., 2010; Yao & Zhong, 2014), on alienation. The absence of any research examining the relationship between these variables makes the study important. In the light of the literature, the following model has been proposed, and the proposed model has been tested:

Figure 1
Model Explaining Alienation



We propose four hypotheses:

H₁: Internet addiction predicts spiritual well-being (path “a”).

H₂: Spiritual well-being predicts alienation (path “b”).

H₃: Internet addiction predicts alienation (path “c”).

H₄: Spiritual Well-being mediates the relationship between the internet addiction and alienation (path “c’”).

Method

Research Model

This study uses a correlational survey model. The relationships between variables were tested with mediation tests. Mediation tests are tests which require the existence of another variable in the relationship between two variables (Şimşek, 2007). A mediation model is any causal system and, in this system, at least one antecedent variable is proposed as influencing an outcome through a single intervening variable called a mediator (Hayes, 2018). Partial mediation allows c' to be significant. Because there are many explanations for social behavior, partial mediation is considered more reasonable than the full mediation model (MacKinnon, 2012).

Study Group

Data were collected from 345 people for the study. Data analysis was conducted with 320 people after those who filled in the forms incompletely, and those who filled in the form of mosaics and extreme data were eliminated. The study group consisted of 320 randomly selected college students. In the first stage, the university to be researched was chosen randomly. In the second stage, since it is difficult to reach the list of all classes in the university, data were collected from each class level until the number determined for the sample was reached. 183 (57.2%) were female and 137 (42.8%) were male. The participants' ages ranged between 19 and 35. The mean age is 20.74, and the standard deviation is 1.362.

Data Collection Instruments

Internet Addiction Scale

Young's Internet addiction test (Young, 1998a) was made into a short form by Pawlikowski et al. (2013) and it was adapted for use in Turkey by Kutlu et al. (2016). The scale has a 5-Likert type and consists of 12 items and a single factor. Sample scale items are "How often do you stay online longer, neglecting family chores?" and "How often do you keep it a secret or get defensive when someone asks what you are doing online?" KMO (Kaiser-Meyer-Olkin) coefficient factor .91, which was obtained as a result of exploratory factor analysis and Barlett Sphericity test χ^2 value of 2077.04, show that the scale is suitable for factor analysis. Fit indices obtained through confirmatory factor analysis ($\chi^2=144.93$, $SD=52$, $RMSEA=0.072$, $RMR=0.70$, $GFI=0.93$, $AGFI=0.90$, $CFI=0.95$ and $IFI=0.91$) show that scale values are within acceptable limits. Cronbach's Alpha internal consistency coefficient obtained as a result of reliability is .91. Cronbach Alpha internal consistency coefficient obtained within the context of the present study is .81.

Alienation Scale

This scale was developed by Dean (1961) and adapted for use in Turkey by Güğərçin and Aksay (2017). The scale is a 5-Likert type scale and consists of 20 items and three sub-dimensions (isolation, powerlessness, and normlessness). Sample scale items are "The number of ties that bind people together has decreased these days" and "Sometimes I feel completely alone in the world." Exploratory factor analysis found that the three sub-dimensions explained 55% of the scale's variance. Confirmatory factor analysis (CMIN/DF:1.72; CFI: .94; RMSEA:06; SRMR:.93; TLI:.93) show that the model gave a good fit. The Cronbach's Alpha internal consistency coefficient of the scale is .88 for total score. The internal consistency coefficient obtained within the scope of this study is .71.

Spiritual Well-Being Scale

The scale was developed by Ekşi and Kardaş (2017). The scale is a 5-Likert type scale and it consists of 29 items and 3 sub-dimensions (transcendence, harmony with nature, and anomie). Sample scale items are “I think nature should be respected” and “Being connected to a divine power gives me confidence.” The exploratory factor analysis found that the three sub-dimensions explained 58.337% of the total variance regarding the scale. Fit indices obtained as a result of the confirmatory factor analysis ($\chi^2/SD = 4.11$, RMSEA = .06, SRMR = .50, NFI = .90, CFI = .92) showed that the model had a good fit. The Cronbach’s alpha internal consistency coefficient was found as .89 for the total score of the scale. The internal consistency coefficient obtained within the scope of this study is .82.

Data Collection and Analysis

The data were collected face to face from students on a voluntary basis. Students were told that the data obtained would be used only for scientific purposes. Ethics committee permission was obtained (... University Ethics Committee, Date:06/07/2022, Number: 48/16). SPSS and SPSS add-in PROCESS were used for data analysis. The effect of the mediating variable was measured with PROCESS model 4, which is a macro added to the SPSS program by Hayes (2012). This add-in, which uses a non-parametrical Bootstrap method, performs analysis with a 95% confidence interval on a sample size of 5000 individuals with resampling. The effect of the independent variable on the dependent variable was calculated with direct effect, indirect effect, and total effect scores. The efficiency of the mediating variable was calculated with a bootstrap confidence interval. The lower and upper limits of the confidence interval (BootLLCI-BootULCI) being below or above zero and the absence of “0” between the two values shows that the intermediary variable mediates. The Bootstrap method also decreases TYPE II error (Preacher & Hayes, 2008).

Results

Table 1 shows the demographic characteristics of participants and the relationships of these characteristics to other variables.

Table 1
Socio-Demographic Profile of the Participants

Variables	N=320 f, n (%)	M/SD	t *Gender	p	F*Grade	Post hoc
Gender						
Female(F)	183 (57.2)					
Male(M)	137 (42.8)					
Grade Level						
1. grade						
2. grade	45 (14.1)					
3. grade	168 (52.5)					
4. grade	71 (22.2)					
	36 (11.3)					
Age						
		20.74/1.36				
IA		28.15/7.16	.281	p>.05	1.02	-
A		122.99/10.28	-.121	p>.05	.212	-
SWB		66.96/9.12	1.81	p>.05	1.32	-

IA: Internet addiction; A: Alienation; SWB: Spiritual well-being.

According to Table 1, internet addiction ($t_{(318)}=.281$, $p>.05$), alienation ($t_{(318)}=.121$, $p>.05$) and spiritual well-being ($t_{(318)}=1.81$, $p>.05$) do not differ by gender. Similarly, internet addiction ($F_{(3,316)}=1.02$, $p>.05$), alienation ($F_{(3,316)}=.212$, $p>.05$) and spiritual well-being ($F_{(3,316)}=1.32$, $p>.05$) do not differ significantly by grade level.

Before the model was tested, descriptive statistics of the variables and the association of the variables with each other were examined and the results obtained are given in Table 2.

Table 2
Descriptive Statistics and Correlation Coefficients of the Variables

Variables	N	M/Sd	Skewness	Kurtosis	IA	A	SWB
IA	320	28.15/7.16	.409	-.054	-		
A	320	66.96/9.12	-.061	.150	.371**	-	
SWB	320	122.99/10.28	-.400	.081	-.392**	-.404**	-

**p<.01, IA: Internet Addiction; A: Alienation; SWB: Spiritual well-being.

According to Table 2, there is a moderately positive relationship between internet addiction and alienation ($r=.37$, $p<.01$), and a moderately negative relationship between Internet addiction and spiritual well-being ($r=.39$, $p<.01$).

Mediation Analysis

The mediation model of spiritual well-being on the relationship between Internet addiction and alienation is shown below.

Figure 2
Model on the Mediating Effect of Spiritual Well-Being on The Relationship between Internet Addiction and Alienation

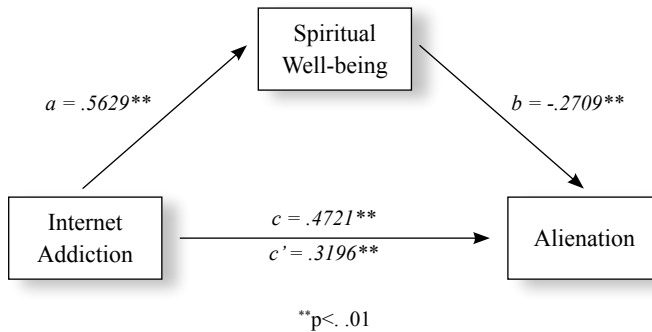


Figure 2 shows the a, b, c, and c' pathways and the standardized regression coefficients of these pathways for the mediating effect of spiritual well-being on the relationship between Internet addiction and alienation. Four conditions are put forward for mediator model testing. In this model, the independent variable should predict the dependent variable, the independent variable should predict the mediating variable, and the mediating variable should predict the dependent variable. When the mediating variable is included in the analysis with the independent variable, the effect of the independent variable on the dependent variable should decrease to zero or should decrease significantly. When the mediating variable is included in the analysis, the independent variable becoming zero (0) shows full mediation, while a significant decrease shows partial mediation (Baron & Kenny, 1986).

In examining the model, we see that Internet addiction negatively predicts spiritual well-being ($a = -.5629^{**}$; 95% CI [-.7086, -.4172]); spiritual well-being negatively predicts alienation ($b = -.2709^{**}$; 95% CI [-.3653, -.1766]); and Internet addiction positively predicts alienation ($c = .4721^{**}$; 95% CI [.3614, .6027]). When the mediating variable is included in the analysis, the regression coefficient between Internet addiction and alienation becomes ($c' = .3196^{**}$; 95% CI [.4551, 1842]). With the addition of spiritual well-being in the model, a significant decrease (from $c = .4721$ to $c' = .3196$) occurs in the regression coefficient. Direct effect, indirect effect, total effect, and bootstrap confidence were examined to test whether the decrease that occurred after the mediating variable was included in the model was due to the effect of the mediating variable. The results are given in Table 3.

Table 3
Direct, Indirect, and Total Effect Data of The Independent Variable on Dependent Variable and Bootstrap Confidence Interval Data

The effect mediated by spiritual well-being	Total Effect	Direct Effect	Indirect Effect	Bootstrap Confidence Interval BootLLCI-BootULCI	Type of Mediation
IA-A	.4721	.3196	.1525	.0961, .2170	Partial

According to these results, the total effect of Internet addiction on alienation is $.4721$ $p < .000$, with a direct effect of $.3196$ $p < .000$ and an indirect effect of $.1525$ $p < .000$. The Bootstrap confidence interval is above zero ($.0961$ -. $.2170$) and '0' is not between the two values. According to these results, spiritual well-being is a partial mediator between Internet addiction and alienation.

Discussion

This study examined the mediating effect of spiritual well-being in the relationship between Internet addiction and alienation in a population of college students and found that in this population, spiritual well-being has a partial mediating effect between Internet addiction and alienation.

The first hypothesis of the study was that Internet addiction predicts spiritual well-being. This hypothesis was confirmed, with internet addiction negatively predicting spiritual well-being. Spiritual well-being has been found to be negatively associated with both behavioral addictions such as Internet addiction (Ahmadi et al., 2018), smartphone addiction (Shim, 2019), social media addiction (Wood et al., 2016), and chemical addictions such as alcohol dependence and substance use (Dermatis & Galanter, 2016; Hill et al., 2000). In addition, it has been found that spiritual individuals have lower levels of using Internet pornography (Short et al., 2015). In other words, both substance addiction and Internet addiction decrease as spiritual well-being increases.

Spiritual well-being is positively associated with meaning (Rohde et al., 2017), naturalness and originality (Helminiak, 2001), life quality (Allahbakhshian et al., 2010), purpose (Ellison, 1983) and happiness (Gomez & Fisher, 2003). Smartphone addiction, which can be seen as a reflection of Internet addiction, is negatively associated with living a meaningful and purposeful life (Çevik et al., 2020; Yaran, 2020). Internet addiction has also been shown to decrease quality of life (Tanhan, 2020; Young et al., 1999).

Spiritual well-being refers to positive emotions, behaviors, and cognitions such as satisfaction, sense of wholeness, a positive attitude, inner peace, harmony, and purpose (Gomez & Fisher, 2003). On the other hand, Internet addiction refers to negative emotions such as moodiness, irritability, conflicts in the inner world of the individual, loss of control over her/his life, conflict with other people, and irresponsible behavior in the work, family, and academic field (Griffiths, 2005). In this context, it can be said that when Internet addiction increases, positive emotions, thoughts, and attitudes such as harmony, purpose, satisfaction, and inner peace will decrease, in other words, spiritual well-being will decrease.

The second hypothesis of the study was that spiritual well-being predicts alienation. This hypothesis was confirmed, with spiritual well-being negatively predicting alienation. Some studies which show that alienation is negatively associated with spiritual well-being (Jaberi, et al., 2019; Schwartz, 2021; Vahedi & Nazari, 2011). Spiritual well-being is positively associated with resilience in the face of difficulties (Cotton et al., 1999; Tanhan et al., 2021). On the other hand, it is seen that one of the dimensions of alienation is weakness, which is being far from the spirit of struggle and accepting the imposition of conditions (Dean, 1961). Similarly, studies show that spiritual well-being is positively associated with coherence and adaptability (Tanhan & Francisco, 2019; Unterrainer et al., 2010), while alienation consists of the components of anomie and isolation beyond coherence and adaptability. Spiritual well-being increases psychological well-being and psychosocial health (Gomez & Fisher, 2003; Karakus et al., 2021; Tanhan, 2019, 2020). An alienated individual who moves away from others and from her/his own nature (Kaufmann, 1980) is likely to have high levels of psychological stress (Ifeagwazi et al., 2015). Like some previous studies, our research suggests that low spiritual well-being is correlated with increased alienation.

The third hypothesis of the study was that Internet addiction predicts alienation. This hypothesis was confirmed, with Internet addiction positively predicting alienation. Internet addiction has been found to be associated with alienation (Li et al., 2010), and sub-dimensions of alienation such as social exclusion (Poon, 2018; Tas & Öztosun, 2018), and isolation (Davis, 2001; Shaw & Black, 2008). Social isolation has also been found to be positively associated with the amount of daily Internet use (Müezzini, 2017). One criterion for Internet addiction is a loss of control over one's Internet use (Shapira et al., 2000) and another is having the Internet continually occupy one's mind against their will (Young, 1998b). Both criteria can produce weakness (one of the sub-dimensions of alienation) which in this case refers to an individual's loss of control over her/his life (Seeman, 1959).

An individual's excessive involvement in the virtual world can lead to their isolation from the offline society. Excessive Internet use can lead to damaged relationships, missed opportunities in education and business (Tanhan, 2020; Young, 1998b), and exclusion from the social life. These risks (such as endangering job, education, career, and experiencing problems in private life) may also further alienate someone from social norms and drive them to anomie.

The fourth hypothesis of the study was that spiritual well-being mediates the relationship between internet addiction and alienation. This hypothesis was confirmed, with spiritual well-being partially mediating the relationship between internet addiction and alienation. In other words, individuals with Internet addiction become

alienated, while a high spiritual well-being level decreases alienation. Spiritual well-being is an important factor in increasing psychological functioning (McClain et al., 2003; Tanhan, 2019, 2020). Low psychological functioning may cause Internet addiction (Nam et al., 2018), which is positively associated with psychological problems. And these problems can increase levels of alienation (Fromm, 2008). Spiritual well-being is negatively associated with psychological problems such as despair and suicidal thoughts (McClain et al., 2003), depression (Bekelman et al., 2007; Fehring et al., 1987), neuroticism, and aggression (Unterrainer et al., 2010). Therefore, increasing spiritual well-being can be effective at both decreasing Internet addiction and decreasing the negative effect of Internet addiction on alienation.

Limitations

The present study has limitations. Participants in this study were college students in Turkey. This may constitute a limitation in generalizing the results of the study to people in the same age group. Another limitation is the use of previously constructed quantitative data collection tools. Such tools may not fully capture complex concepts like addiction, spirituality, and well-being. The socio-demographic variables (e.g., gender, age and grade level) used in the study are limited. This may create a limitation for a more detailed assessment of the working group.

Implications and Suggestions

Considering the effect of Internet addiction on alienation, mental health professionals can investigate the possible effects of Internet addiction on clients struggling with alienation. Mental health professionals can try to increase the spiritual well-being levels of individuals who experience Internet addiction tendency or alienation, considering that spiritual well-being does not represent an institutional religion, it is a structure different from religion (Moberg & Brussek, 1978; Tanhan, 2020), and it is a strengthening factor, especially for individuals who feel desperate (Helminiak, 2001; Tanhan, 2019, 2020).

Educators can add modules to their psycho-education programs to increase spiritual well-being in their psycho-education programs to reduce Internet addiction by considering the effect of Internet addiction on spiritual well-being. In addition, educators can add modules to and increase spiritual well-being. in their psycho-education programs that they will prepare to reduce the alienation level of individuals, taking into account the effect of spiritual well-being on alienation. Further, educators can utilize small-group work to serve as an effective approach for the facilitation of social well-being and social connectedness (Dari et al., 2021).

Researchers can test the results of this preliminary research by investigating the

relationship between these variables in different groups (e.g., students studying in different departments, adolescents, and adults). Researchers can reduce these limitations by using different tools (e.g., interviews) and research methods (e.g., longitudinal studies). Collaborative efforts such as Community-based participatory research (CBPR) methods can be used to explore the causes and effects of Internet addiction in collaboration with populations most impacted by it (Dari et al., 2019). Contextually sensitive, and comprehensive phenomenological qualitative methods such as Online Photovoice offer new mediums for exploring individual perspectives (OPV, Tanhan, 2020; Tanhan & Strack, 2020).

Conclusion

In this study on college students in Turkey, a relationship was determined between Internet addiction, spiritual well-being, and alienation. Our findings show that Internet addiction plays an important role in alienation in this sample. It also shows that spiritual well-being can be effective at both reducing Internet addiction and reducing alienation. In addition, spiritual well-being can decrease the negative effect of Internet addiction on alienation.

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Data availability

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethical Approval: All procedures performed in studies involving human participants were in accordance with the national ethical standards and with the Helsinki declaration. Ethical approval was obtained from the university's ethics committee for the study.

Informed Consent: Informed consent was obtained from the students participating in the study.

Conflict of Interests: I report no conflict of interest.

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