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# THE MEDIATING ROLE OF EMOTIONAL INTELLIGENCE IN THE RELATIONSHIP BETWEEN THE FEAR OF MISSING OUT IN SOCIAL ENVIRONMENTS (FoMO) AND DEPRESSION

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#### Abstract:

This study sets out to explore whether emotional intelligence has a mediating role in the relationship between fear of missing out in social environments (FoMO) and the depression among university students. The study group consisted of 370 (200 female and 170 male) university students between the ages of 18 and 30. The data of the study were collected through FoMO scale, emotional intelligence feature scale -short form-, and Beck depression scale. Correlation and regression analysis were conducted for data analysis. As a result of this study, it was concluded that FoMO is a significant predictor of depression and emotional intelligence, and emotional intelligence is a significant predictor of depression. In addition, it was concluded that emotional intelligence has a mediating role in the relationship between FoMO and depression. The results were discussed and suggestions were made through the literature review.

Keywords: FoMO, depression, emotional intelligence

## 1. Introduction

Mobile phones are accessible almost everywhere nowadays. The smartphone owners, and especially younger users, representing today's generation called "always on", are in constant contact with their phones (Schmidt, Muench, Schneider, Breitenbach & Carolus, 2018). The smartphone accompanies its owner all day long and supports the person in difficult times by making his/her life easier. In other words, the smartphone is not only technical equipment but it is also a digital accompaniment (Carolus et al., 2018). With this

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feature, mobile communication contributes to increasing social connection, being connected or feeling of belonging, as well as communicating with families, friends and other ones (Deci & Ryan, 2012). Although mobile phones were used only as a means of communication, they have played many roles, especially socialization, and have become the symbol of the twenty-first century (García-Montes, Caballero-Munoz & Perez-Alvarez, 2006).

The desire and trend of using a mobile device in the age of ever-growing technology innovations makes people feel a necessity or obligation such as staying in touch and getting in touch with others (Rogers, 1995). The penetration of smart phones to life has enabled the internet accessible from anywhere and at any time (Giner-Bartolomé et al., 2015). The digital world has become indispensable for people and in its absence, it pushes the limits of people's tolerance. Fears such as running out of mobile phones, running out of internet packages, forgetting the phone at home have been added to many problems or fears in the global world. This fear of ending, exhaustion, forgetting or losing has become a global phenomenon (Schreckinger, 2014). FoMO has been translated to Turkish as "fear of missing out in social environments". FoMO, known as "feeling of missing out" or "fear of missing out", is one of these rapidly spreading phenomena (Hayran, Anik & Gürhan-Canli, 2016). People have always had curiosity or tendencies about what others are doing (Abel, Buff & Burr, 2016). FoMO is defined as the desire to constantly observe what others do through social media (Przybylski et al., 2013). In another definition, FoMO emerges as "the severe deprivation feeling that individuals face due to positive developments occurring in their absence and a severe sense of deprivation that individuals face because of positive experiences they cannot involve." (Hayran, Anik & Gürhan-Canli, 2017). Although providing easy connections anytime and anywhere increases real-time digital contact with individuals or groups, people try to check their mobile phones every second to avoid missing any new information or rewarding experience (Vaughn, 2012). In this respect, this case starts with an intense dependence on social media and turns into mobile phone addiction (Chaudhry, 2015). When the Social Networking Sites (SNS) 2018 report is analyzed, it is observed that young people between the ages of 18 and 28 use any platform in the social media. It has been indicated that 88% of those aged 18 to 29 have at least one social media account, and social media sites such as Instagram and snap chat are the most popular. It was also determined that 74% of Facebook users visited the site at least once a day. 51% of those aged between 18 and 24 stated that it was very difficult to give up social media (Smith & Anderson, 2018). According to the data of We are Social 2018 Turkey report, 63% of the population (52 million) actively use social media. They spend an average of 2 hours and 46 minutes per day on social media. In terms of gender, men use social media more than women and 24% of the users are in the 18-24 age group (We are Social, 2018). These figures display the prevalence of social media use and how intense it is around the age of 18.

Constant contact with others can lead to many physical and mental problems (Baker, Krieger & LeRoy, 2016). There have been many different studies illustrating the

relationship between FMO and adolescents' negative physical symptoms Milyavskaya, Saffran, Hope & Koestner, 2018), increased alcohol use (Riordan et al, 2015), increased stress level (Beyens, Frison & Eggermont, 2016) and sleep problems (Rosen et al., 2016). Addictive use of smartphone has been revealed to be associated with some mental health problems such as depression (Elhai, Levine, Dvorak & Hall, 2016; Elhai, Yang, Fang, Bai & Hall, 2020).

Blackburn (2005) described depression as a mental disorder in which many emotions were experienced together (sadness, pessimism, frustration, etc.). Rudolp (2009) stated that depression is a serious mental health problem with significant personal and social costs and its consequences. Depressed people tend to evaluate themselves and the world in a negative way (Beck, 1976). Depression, like FoMO, is one of the most common disorders in adolescents. As a matter of fact, Miller (2002) found the prevalence rate of depression to be 8.5% in adolescents, and Ingram (2009) stated that this rate reached 20% in individuals around the age of 18. In another study, depression was reported to be one of the two most important disorders in 2020 worldwide (Lopez & Mathers, 2013). In recent years, it has been observed that there is an increase in research on the relationship between social media and depression. Many studies demonstrated the positive relationship between depressive symptoms and the use of Facebook and Instagram (Tandoc, Ferrucci & Duffy, 2015; Donnelly ve Kuss, 2016; Lup, Trub, ve Rosenthal, 2015; Hunt, Marx, Lipson, Young, 2018; Primack et al., 2017). It is also thought that the use of Facebook triggers envy behavior to the experiences of others and negatively affects well-being (Krasnova, Wenninger, Widjaja & Buxmann, 2013). Sette et al. (2019) conducted a study on 409 participants aged 18 to 63 years, and found that those who had been diagnosed with depression or who had previously attempted suicide had higher FoMO levels. Another research has shown that tendency to distress and FoMO mediate the relationship between depression and anxiety and smartphone problem (Wolniewicz, Rozgonjuk & Elhai, 2019). Wang et al. (2018) indicated that social media addiction positively predicted adolescent depression as a result of their study on 365 high school students in China. Baker, Krieger and LeRoy (2016) found that FoMO was associated with depressive symptoms in their research on university students. Oberst, Wegmann, Stodt, Brand and Chamarro (2017) revealed that depression triggered social media addiction, especially for girls. In conclusion, studies in the literature illustrate that there is a positive correlation between FoMO and depression.

While people are suffering from depression and FoMO throughout their lives, they strive to reach an emotional balance. Since it is not easy to establish this balance, individuals who are able to balance are more easily distinguishable from other people as they can better adapt to their social environment physically and mentally (Fernández-Berrocal, Salovey, Vera, Extremera & Ramos, 2005). At this point, the concept of emotional intelligence "eq", which has been the subject of many studies, comes into play. Emotional intelligence was introduced by Mayer and Salovey in 1990 and began to attract attention in book, "Emotional Intelligence", written by Goleman. Emotional intelligence is the ability of a person to understand and control one's own emotions, and then to

understand the emotions of others and to carry out this relationship in the most healthy way (Mayer & Salovey, 1993). Goleman (2010) argues that emotion management is an important ability, it can be improved. The ability to communicate and maintain effective communication with other people is an important component of emotional intelligence. It has been suggested that individuals who do not care about their emotions and who are unable to use and control them in a healthy and appropriate manner may exhibit weaker psychological and emotional adaptation (Salovey, 2001). Social media is a virtual platform that requires interaction with and adaptation to people (Merwe, 2014). The literature illustrates that there is a negative correlation between emotional intelligence and internet addiction, including the use of social networks (Hamissi, Babaie, Hosseini & Babaie, 2013; Maddi et al., 2013; Far, Samarein, Yekleh, Tahmasebi & Yar Yari, 2014; Merwe, 2014), addiction to smart phones (Deursen, Bolle, Hegner and Kommers, 2015), and online social interaction (Casale, Tella and Fioravanti, 2013). In addition, the relationship between depression and emotional intelligence is examined in studies showing that there is a significant negative correlation between depression and emotional intelligence (Fernández-Berrocal et.al, 2005; Fernandez-Berrocal, Alcaide, Extremera & Pizarro, 699 2006; Salguero, Extremera & Fernández-Berrocal, 2012). Salovey (2001) suggested that there is a negative correlation between the concept of emotional intelligence and variables including psychological adjustment such as depression. Through literature review, there was no study investigating the relationship between the FoMO and depression. In addition, there was no other study in the related literature that examined the mediating role of emotional intelligence in the relationship between FoMO and depression. In this respect, this study was considered important in terms of being original and its contribution to the literature.

As a result, considering the studies and theoretical views through the literature, the purpose of this study is to investigate the mediating role of emotional intelligence in the relationship between FoMO and depression. The hypotheses developed to test the mediating effect of emotional intelligence in the relationship between FoMO and depression is presented below:

Hol: There is a positive significant correlation between FoMO and depression.

**H**<sub>02</sub>: There is a negative significant correlation between FoMO and emotional intelligence.

H<sub>03</sub>: There is a negative significant correlation between emotional intelligence and depression.

**H**<sub>04</sub>: Emotional intelligence has a mediating effect on the relationship between FoMO and depression.

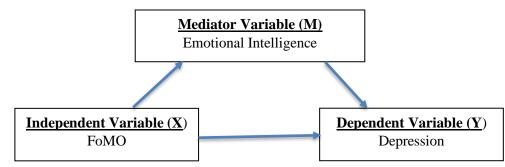


Figure 1: Predicted hypothesis model

## 2. Material and Methods

## 2.1 Study Group

The study group of this research consisted of 370 university students from 18-30 years of age from various departments (Turkish, Classroom, Preschool, Elementary Mathematics Teaching, Guidance and Psychological Counseling) at Niğde Ömer Halisdemir University. These students were selected by convenience sampling method.

## 2.2 Data Collection Instruments

## A. The Fear of Missing Out in Social Environments (FoMO) Scale

The scale was developed by Przybylski (2013) and it was adapted to Turkish culture on 200 university students by Gökler, Aydın, Ünal and Metintaş (2016). The scale consisted of 10 items in a five-point Likert scale and included the statements of the individuals about their own lives. The scoring was done in the range of 1-5 points for each item (1 = not true at all, 5 = extremely true). As a result of the adaptation of the scale to Turkish culture, a single factor structure with factor loads ranging from 0.36 to 0.77 was obtained. The Cronbach alpha coefficient was determined as 0.81 and the test-retest reliability coefficient was determined as 0.81. In this study, the cronbach alpha coefficient was found as 0.72.

#### **B. Emotional Intelligence Feature Scale – Short Form**

The validity and reliability study of the Turkish version of the Emotional Intelligence Feature Scale-Short Form developed by Petrides and Furnham (2000, 2001) was conducted by Deniz, Özer and Işık (2013) on 464 university students. As a result of the factor analysis, a 4-factor structure was obtained: subjective well-being, self-control, emotionality and sociality. The scale consists of 20 items and the total emotional intelligence score is calculated by summing the scores of 4 items. The internal consistency reliability coefficient of the scale was .81 for the whole scale and the test-retest reliability coefficient was .86. In this study, the Cronbach alpha coefficient was found to be 0.82.

#### C. Beck Depression Scale

The scale which was developed by Beck et al. To determine the depression status of individuals was adapted toTurkish by Hisli (1988).The scale consists of 21 itemsand is scored on a 0-3 scale.The split-half reliability coefficient of the scale was 0.74, and the criterion-dependent validity was 0.63. In this study, the Cronbach alpha coefficient was found to be 0.74.

## 2.3 Processing

Ethical permissions and data collection permission were obtained from the Ethics Committee of Niğde Halisdemir University for ethical suitability of the study and the data collection phase of the study was started. The purpose of the study was stated to the volunteer participants who agreed to participate in the study and the data were collected. The data were processed in the computer packages. The scales not completely filled were not included in the analysing process.

## 2.4 Data Analysis

Correlation and regression analysis were conducted for data analysis. The prerequisites of the regression analysis were checked. Assumptions of regression analysis were tested before analysis. Initially, the suitability of the data to the normal distribution was tested by examining the skewness and kurtosis values. Skewness and kurtosis values were found to be between -1 and +1, the ideal range accepted in the literature for each scale. It was concluded that the data showed normal distribution (Hair, Black, Babin & Anderson, 2013). Durbin-Watson coefficient was used to test autocorrelation. Durbin-Watson values ranged from .37 to 1.75. Tolerance values were between 0.94 and 1.00 and VIF values were between 1.00 and 1.05. Thus, due to the tolerance approaching 0 and the absence of VIF value greater than 5, it is admitted that the data set does not have multiple connections (Tabachnick & Fidell, 2013; Büyüköztürk, 2007). The correlation coefficients between the predictive variables above 0.80 (Büyüköztürk, 2007) and above .90 (Pallant, 2013) relative to another source are indicative of the multicollinearity problem. In this study, the correlation coefficients between the predictive variables ranged from -0.23 to -0.42 (Table-1). As a result, it was concluded that the findings obtained were suitable for regression analysis.

The mediating effect of emotional intelligence in the relationship between FoMO and depression was examined according to the conditions suggested by Baron and Kenny (1986). These conditions were as follows: (1) The two variables (FoMO and depression) should be significantly related. (2) The proposed mediator variable (emotional intelligence) should be related to these two variables. (3) There should be a reduction in the relationship between the two variables when the mediator variable (emotional intelligence) is controlled [In the study, the significance level of the decrease in beta ( $\beta$ ) value was evaluated using Sobel test]. In addition, "bootstrapping analysis" was conducted to compare the direct and indirect effects of FoMO on depression through emotional intelligence (Table 3).

#### 3. Results

	FoMO	<b>Emotional Intelligence</b>	Depression	
FoMO	1			
Emotional Intelligence	236**	1		
Depression	.237**	423**	1	
Mean	24.010	18.781	13.754	
Standard Deviation	5.855	4.386	6.285	
<u>Skewness</u>	.306	059	.360	
Kurtosis	.487	512	341	
Cronbach's Alfa (α)	.728	.825	.744	

**Table 1:** The findings about the results of correlation analysis and descriptive statistics on the relationships between FoMo, emotional intelligence and depression

\*\*p<.01

When the table is examined, it is seen that there is a significant negative correlation between emotional intelligence and FoMO among university students (r=-.236; p<.01). There is a significant positive correlation between depression and FoMO (r=.237; p<.01). There is a significant negative correlation between emotional intelligence and depression (r=-.423; p<.01). The fact that the relationship between the variables is lower than .80 indicates that there is no multicollinearity problem which is a prerequisite for analysis for regression (Büyüköztürk, 2007). In addition, when the skewness and kurtosis values are considered for the normal distribution of the data, which is another prerequisite for the regression analysis, it is found that the values are between -1 and +1 and the data illustrates normal distribution. (Hair, Black, Babin & Anderson, 2013).

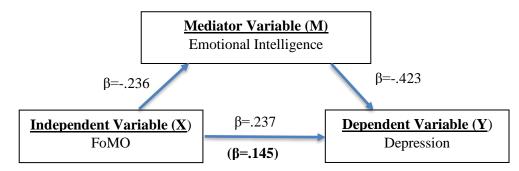
	Predictors (X)	Dependent Variable(Y)	В	Std. Error	β	t	р
Chara 1	БоМО	Depression	7.655	1.344		5.697	.000***
Step 1	FOINIO	Depression	.254	.054	.237	4.672	.000***
Step 2	FoMO	Emotional	23.029	.938		24.559	.000***
		Intelligence	177	.038	236	-4.662	.000***
	Emotional Intelligence	Dermonian	25.127	1.306		19.244	.000***
Step 3 Emotional Intelligence		Depression	606	.068	423	-8.944	.000***
Step 4	FoMO		20.470	2.014		10.164	.000***
		Depression	.156	.052	.145	3.014	.003**
	Emotional Intelligence		556	.069	388	-8.074	.000***

Table 2: Findings in regression analysis

\*\*p<.01, \*\*\*p<.001 ([Step-1: R=.237; R<sup>2</sup>=.056; F= 21.832], [Step-2: R=.236; R<sup>2</sup>=.056; F= 21.735], [Step-3: R=.423; R<sup>2</sup>=.179; F= 79.995], [Step-4: R=.445; R<sup>2</sup>=.198; F= 45.417])

When the table is examined, it is seen that FoMO is a significant predictor of depression ( $R^2$ =.056; F=21.832; p<.001) and emotional intelligence ( $R^2$  =.056; F = 21.735; p<.001). In addition, emotional intelligence was found to be a significant predictor of depression ( $R^2$ =.179; F=79.995; p<.001). FoMO and emotional intelligence seem to explain depression ( $R^2$ =.198; F= 45.417; p<.01) when they are included in the model. When FoMO and

emotional intelligence are included in the model, the statistically significant contribution of FoMO to the model still continues and it is seen that the relationship between FoMO and depression is decreased ( $\beta$ =.145; p<.01). As a result of the analysis, it was concluded that emotional intelligence has a partial mediator role (Sobel Z= 4.032; Std. Error=0.024; p=.000) in the relationship between FoMO and depression (Figure 2). A comparison of the direct and indirect effects of FoMO on depression through emotional intelligence is given in Table 3.



**Figure 2:** The mediator role of emotional intelligence in the relationship between FoMO and depression

			Product of Coefficients		Bootstrapping 95% BCa Confidence Interval		
Effects	Point Estimate	SE	t	р	Lower	Upper	
Indirect Effect	.0984	.0236			.0535	.1467	
Total Effect	.2540	.0544	4.6725	.000***	.1471	.3609	
Direct Effect	.1556	.0516	3.0136	.003**	.0541	. 2571	

**Table 3:** Comparison of the direct and indirect effects of FoMO on depression through emotional intelligence

\*\*p<.01, \*\*\*p<.001; N=370; BCa: Bias corrected and accelerated 5000 bootstrap samples

The indirect effect of the model that investigated the intermediary role of emotional intelligence in the relationship between FoMO and depression was tested with 5000 bootstrap samples. In the model, estimations were evaluated within 95% confidence interval and bias error was eliminated. Research illustrates that FoMO explains depression through emotional intelligence (point estimate= .0984 and % 95 BCa CI [.0535, .1467]).

#### 4. Discussion and Conclusion

The purpose of this study is to investigate the mediating role of emotional intelligence in the relationship between FoMO and depression.

The first hypothesis of the study, "There is a significant positive correlation between FoMO and depression" was confirmed. When the literature was reviewed, many studies supporting this finding were found. Baker, Krieger and LeRoy (2016) investigated the relationship between FoMO and depression, awareness, and physical symptoms on 386 university students and they revealed that those with higher levels of FoMO have higher depressive symptoms. In their experimental study of Hunt et al.(2018) On 143 university students, it was found that depression symptoms decreased in the experimental group whose social media usage was restricted compared to the control group. Sette et al. (2019) conducted a study on 409 participants aged between 18 and 63 and concluded that those who had been diagnosed with depression or had attempted suicide had higher FoMO levels. In another study, it has been suggested that distress tendency and FoMO mediates the relationship between depression and anxiety and problematic smartphone use (Wolniewicz et al., 2019). (2018) As a result of the study of Wang et al. (2018) on 365 high school students in China, it was found that social media addiction positively predicted adolescent depression. Baker, Krieger and LeRoy (2016) found that FoMO was associated with higher depressive symptoms in their research on university students. There are also many studies illustrating the positive relationship between Facebook and Instagram use on social media and depressive symptoms (Tandoc, Ferrucci & Duffy, 2015; Donnelly & Kuss, 2016; Lup, Trub & Rosenthal, 2015; Hunt et al., 2018; Primack et al., 2017). While establishing this hypothesis, it is assumed that individuals who experience FoMO may experience more frustration, hopelessness, and unhappiness, so they are more likely to experience depressive symptoms. Both the conclusions reached in this study and the conclusions reached in previous studies confirm this hypothesis.

The second hypothesis of the study, "There is a significant negative relationship between FoMO and emotional intelligence." was also confirmed by the results of the analysis. Although there is no study in the literature that directly investigates the relationship between emotional intelligence and FoMO, there are some studies investigating the relationship between emotional intelligence and internet and social media use which are close to FoMO. Casale, Tella and Fioravanti (2013) concluded that there was a negative relationship between emotional intelligence and online social interaction in their study on 192 high school students. Beranuya, Obersta, Carbonella and Chamarrob (2009) found that emotional intelligence was negatively associated with problematic internet use in a study conducted on 65 undergraduate students. Similarly, there are other studies illustrating that there is a significant negative correlation between emotional intelligence internet addictions, which is a concept close to FoMO (Hamissi, Babaie, Hosseini & Babaie, 2013; Maddi et al., 2013; Far et al., 2014; Merwe, 2014). It can be argued that these findings support the research hypothesis. In a study that is not in line with the findings, Deursen et al. (2015) examined the relationship between addictive smartphone use and emotional intelligence, social stress, self-regulation, and found that there was no significant relationship between smartphone addiction and emotional intelligence. While establishing this hypothesis, it was assumed that individuals who can establish healthy relationships with others and have higher coping skills in negative situations experienced in relationships will have high emotional intelligence levels and it is thought that the fear of missing out theother people's experiences and to follow them continuously will have a negative effect on emotional intelligence. As a result, the second hypothesis of the study has been confirmed and this finding is in parallel with the related studies in the literature.

The third hypothesis of the study, "There is a significant negative correlation between emotional intelligence and depression" was confirmed. There are different studies supporting this finding in the literature. Salguero, Extremera and Fernández-Berrocal (2012) found a significant negative correlation between emotional intelligence and depression. Fernandez-Berrocal et al. (2006) investigated the intermediary role of emotional intelligence in depression and anxiety among adolescents and concluded that there was a significant negative correlation between emotional intelligence and depression and anxiety in adolescents. Downey et al. (2008) concluded that there was a significant negative correlation between depression and emotion management and emotion control sub-dimensions of depression in a clinical sample diagnosed with depression. Similarly, another study conducted in a clinical sample diagnosed with depressionby Batool and Khalid (2009) and it was found that depression levels decreased while emotional intelligence level increased. Yıldız (2016) concluded that there is a negative relationship between depression and emotional intelligence in a study conducted on university students. The results obtained in these studies are consistent with the results of this study. In conclusion, the third hypothesis of the study was confirmed.

The fourth hypothesis of the study, "Emotional intelligence, mediates the relationship between FoMO and depression" was confirmed. This finding illustrates that FoMO has an effect on depression through emotional intelligence. Through literature review, no similar study was encountered to directly support the finding or vice versa. However in their study of the mediator role of rumination and FoMO in the relationship between problematic Facebook use and social anxiety, Dempsey, O'Brien, Tiamiyu and Elhai (2019) found that problematic Facebook usage predicted depression through rumination. The findings of Dempsey et al. (2019) consistent with the findings of this study. In line with the findings obtained in this study, it can be concluded that the positive effect of FoMO on depression is mediated by emotional intelligence. According to these results, the high level of FoMO has a negative effect on emotional intelligence, and low level of emotional intelligence can have a negative effect on mental states such as depression.

This study has some limitations. The first limitation is that only university students in Niğde Ömer Halisdemir University formed the participant group. For future studies, this limitation can be reduced by including participants from different universities. In addition, this subject can be researched on the students from different educational levels such as secondary school and high school and this subject can be examined on different age groups. Another limitation was that the data were obtained only by self-reported measurement tools. In new studies, data collection through observations and interviews might be included.

#### References

- Abel, J. P., Buff, C. L., & Burr, S. A. (2016). Social media and the fear of missing out: Scale development and assessment. *Journal of Business & Economics Research*, 14(1), 33-44. doi: <u>10.19030/jber.v14i1.9554</u>.
- Baker, Z. G., Krieger, H., & LeRoy, A. S. (2016). Fear of missing out: Relationships with depression, mindfulness, and physical symptoms. *Translational Issues in Psychological Science*, 2(3), 275-282. doi: <u>10.1037/tps0000075</u>.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Batool, S. S., & Khalid, R. (2009). Low emotional intelligence: a risk factor for depression. *Journal of Pakistan Psychiatric Society*, 6(2), 65-72.
- Beck, A. T. (1976). *Cognitive therapy and emotional disorders*. New York: International University Press.
- Beranuya, M., Oberst, U., Carbonell, X., & Chamarro, A. (2009). Problematic Internet and mobile phone use and clinical symptoms in college students: The role of emotional intelligence. *Computers in Human Behavior*, 25(5), 1182-1187. doi: 10.1016/j.chb.2009.03.001.
- Beyens, I., Frison, E., & Eggermont, S. (2016). "I don't want to miss a thing": Adolescents' fear of missing out and its relationship to adolescents' social needs, Facebook use, and Facebook related stress. *Computers in Human Behavior*, 64, 1-8. doi: 10.1016/j.chb.2016.05.083.
- Blackburn, I. M. (2005). Depresyon ve başaçıkma yolları. İstanbul: Remzi Kitabevi.
- Büyüköztürk, Ş. (2007). Sosyal bilimler için veri analizi el kitabı. Ankara: Pegem A Yayıncılık.
- Carolus, A., Binder, J. F., Muench, R., Schmidt, C., Schneider, F., & Buglass, S. L. (2018). Smartphones as digital companions: Characterizing the relationship between users and their phones. *New Media & Society*, 21(4), 914-938. doi: <u>10.1177/1461444818817074</u>.
- Casale, S., Tella, L., & Fioravanti, G. (2013). Preference for online social interactions young people: Direct and indirect effects of emotional among intelligence. *Personality* and Individual Differences, 54(4), 524-529. doi: 10.1016/j.paid.2012.10.023.
- Chaudhry, L. (2015). Can you please put your phone away? Examining how the FOMO phenomenon and mobile phone addiction affect human relationships. Poster presented at Virginia Commonwealth University, Richmond, VA. <u>https://scholarscompass.vcu.edu/cgi/viewcontent.cgi?article=1146&context=uresposters</u>Accessed 15 November 2019.
- Deci, E. L. & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: an overview of self-determination theory. In R. M. Ryan

(Ed.), Oxford handbook of human motivation (pp. 85-107). Oxford: Oxford University Press.

- Dempsey, A., O'Brien, K., Tiamiyu, M., & Elhai, J. D. (2019). Fear of missing out (FoMO) and rumination mediate relations between social anxiety and problematic Facebook use. *Addictive Behaviors Reports*, 9, 100150. doi:10.1016/j.abrep.2018.100150.
- Deniz, M. E., Özer, E., & Işık, E. (2013). Duygusal zekâ özelliği ölçeği–kısa formu: geçerlik ve güvenirlik çalışması. *Eğitim ve Bilim, 38*(169), 407-419.
- Deursen, A. J. A. M., Bolle, C. L., Hegner, S. M., & Kommers, P. A. M. (2015). Modeling habitual and addictive smartphone behavior: The role of smartphone usage types, emotional intelligence, social stress, self-regulation, age, and gender. *Computers in Human Behavior*, 45, 411-420. doi:10.1016/j.chb.2014.12.039.
- Donnelly, E., & Kuss, D. J. (2016). Depression among users of Social Networking Sites (SNSs): The role of SNS addiction and increased usage. *Journal of Addiction and Preventative Medicine*, 2(1), 1–6. doi: 10.19104/japm.2016.107.
- Downey, L. A., Johnston, P. J., Hansen, K., Schembri, R., Stough, C., Tuckwell, V., & Schweitzer, I. (2008). The relationship between emotional intelligence and depression in a clinical sample. *European Journal of Psychiatry*, 22(2), 93-98. doi: <u>10.4321/S0213-61632008000200005</u>.
- Elhai, J. D., Levine, J. C., Dvorak, R. D., & Hall, B. J. (2016). Fear of missing out, need for touch, anxiety and depression are related to problematic smartphone use. *Computers in Human Behavior*, 63, 509-516. doi: <u>10.1016/j.chb.2016.05.079</u>.
- Elhai, J. D., Yang, H., Fang, J., Bai, X., & Hall, B. J. (2020). Depression and anxiety symptoms are related to problematic smartphone use severity in Chinese young adults: Fear of missing out as a mediator. *Addictive Behaviors*, 101, doi: 10.1016/j.addbeh.2019.04.020.
- Far, N. S., Samarein, Z. A., Yekleh, M., Tahmasebi, S., & Yaryari, F. (2014). Relationship between the components of emotional intelligence and internet addiction of students in Kharazmi University. *International Journal of Psychology and Behavioral Research*, 3(1), 60-66.
- <u>Fernandez-Berrocal</u>, P., Alcaide, R., Extremera, N., & Pizarro, D. (2006). The role of emotional intelligence in anxiety and depression among adolescents. <u>Individual</u> <u>Differences Research</u> 4(1),16-27.
- Fernandez-Berrocal, P., Salovey, P., Vera, A., Extremera, N., & Ramos, N. (2005). Cultural influences on the relation between perceived emotional intelligence and depression. *Revue Internationale De Psychologie Sociale*, 18, 91-108.
- Garcia-Montes, J. M., Caballero-Munoz, D., & Perez-Alvarez, M. (2006). Changes in the self resulting from the use of mobile phones. *Media Culture and Society*, 28(1), 67-82. doi: <u>10.1177/0163443706059287</u>.
- Giner-Bartolomé, C., Fagundo, A. B., Sánchez, I., Jiménez-Murcia, S., Santamaría, J. J., Ladouceur, R., Menchón, J. M., ... Fernández-Aranda, F. (2015). Can an intervention based on a serious videogame prior to cognitive behavioral therapy

be helpful in bulimia nervosa? A clinical case study. *Frontiers in Psychology, 6,* 982. doi: 10.3389/fpsyg.2015.00982.

- Goleman, D. (2010). *Emotional intelligence: Why it can matter more than IQ*. London: Bloomsbury.
- Gökler, M. E., Aydın, R., Ünal, E., & Metintaş, S. (2016). Sosyal ortamlarda gelişmeleri kaçırma korkusu ölçeğinin Türkçe sürümünün geçerlilik ve güvenilirliğinin değerlendirilmesi. *Anadolu Psikiyatri Dergisi*, 17(1), 52-59.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate data analysis*. Harlow: Pearson Education UK.
- Hamissi, J., Babaie, M., Hosseini, M., & Babaie, F. (2013). The relationship between emotional intelligence and technology addiction among university students. *International Journal of Collaborative Research on Internal Medicine and Public Health*, 5(5), 310-319.
- Hayran, C., Anik, L. & Gürhan-Canli, Z. (2016). Exploring the antecedents and consumer behavioral consequences of "feeling of missing out (FOMO)". In M. Stieler (Ed.), *Creating marketing magic and innovative future marketing trends* (pp. 661-662). Springer, Cham. <u>doi: 10.1007/978-3-319-45596-9 127</u>.
- Hisli, N. (1988). Beck depresyon envanterinin geçerliği üzerine bir çalışma. *Psikoloji Dergisi, 6,* 118-126.
- Hunt, M. G., Marx, R., Lipson, C., & Young, J. (2018). No more FOMO: Limiting social media decreases loneliness and depression. *Journal of Social and Clinical Psychology*, 37(10), 751-768. doi: <u>10.1521/jscp.2018.37.10.751</u>.
- Ingram, R. E. (2009). *The international encyclopedia of depression*. New York: Springer.
- Krasnova, H., Wenninger, H. E., Widjaja, T., & Buxmann, P. (2013). Envy on Facebook: a hidden threat to users' life satisfaction?. In: International Conference on Wirtschaftsinformatik (WI). Leipzig, Germany.
- Lopez, A. D., & Mathers, C. D. (2013). Measuring the global burden of disease and epidemiological transitions: 2002–2030. Annals of Tropical Medicine & Parasitology, 100, 481-499. doi: 10.1179/136485906X97417.
- Lup, K., Trub, L., & Rosenthal, L. (2015). Instagram #instasad?: exploring associations among instagram use, depressive symptoms, negative social comparison, and strangers followed. *Cyberpsychology, Behavior and Social Networking*, 18(5), 247-52. doi: <u>10.1089/cyber.2014.0560</u>.
- Maddi, S. R., Erwin, L. M., Carmody, C. L., Villarreal, B. J., White, M., & Gundersen, K. K. (2013). Relationship of hardiness, grit, and emotional intelligence to internet addiction, excessive consumer spending, and gambling. *Journal of Positive Psychology*, 8(2), 128-134. doi: 10.1080/17439760.2012.758306.
- Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, *17*(4), 433–442. <u>10.1016/0160-2896(93)90010-3</u>.
- Merwe, P. V. D. (2014). Adolescence, Internet use, social adjustment and emotional intelligence. *Mediterranean Journal of Social Sciences*, 5(23), 2327-2339. doi: 10.5901/mjss.2014.v5n23p2327.

Miller, J. A. (2002). *Çocuklarda depresyon*. İstanbul: Özgür Yayınları.

- Milyavskaya, M., Saffran, M., Hope, N., & Koestner, R. (2018). Fear of missing out: prevalence, dynamics, and consequences of experiencing FOMO. *Motivation and Emotion*, 42(5), 725-737. doi: 10.1007/s11031-018-9683-5.
- Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence*, 55, 51-60. doi: 10.1016/j.adolescence.2016.12.008.
- Pallant, J. (2013). SPSS survival manual. McGraw-Hill Education (UK).
- Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences*, 29, 313-320. doi: <u>10.1016/S0191-8869(99)00195-6</u>.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15(6), 425-448. doi: <u>10.1002/per.416</u>.
- Primack, B. A., Shensa, A., Escobar-Viera, C. G., Barrett, E. L., Sidani, J. E., Colditz, J. B., & James, A. E. (2017). Use of multiple social media platforms and symptoms of depression and anxiety: A nationally-representative study among U.S. young adults. *Computers in Human Behavior*, 69, 1-9. doi: <u>10.1016/j.chb.2016.11.013</u>.
- Przybylski, A. K., Murayama, K., DeHaan, C. R. & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841–1848. doi: <u>10.1016/j.chb.2013.02.014</u>.
- Riordan, B. C., Flett, J. A. M., Hunter, J. A., Scarf, D., & Conner, T. S. (2015). Fear of missing out (FoMO): the relationship between FoMO, alcohol use, and alcohol-related consequences in college students. *Journal of Psychiatry and Brain Functions*, 2, 9. doi: <u>10.7243/2055-3447-2-9</u>.
- Rogers, E. (1995). Diffusion of innovations (4th ed.). New York: Free Press.
- Rosen, L., Carrier, L. M., Miller, A., Rokkum, J., & Ruiz, A. (2016). Sleeping with technology: cognitive, affective, and technology usage predictors of sleep problems among college students. *Sleep Health: Journal of the National Sleep Foundation*, 2, 1, 49-56. doi: <u>10.1016/j.sleh.2015.11.003</u>.
- Rudolph, K. D. (2009). Adolescent depression. In I. H. Gotlib & C. L. Hammen (Eds.), *Handbook of depression* (2nd ed., pp. 444-466). New York: Guilford.
- Salguero, J. M., Extremera, N., & Fernández-Berrocal, P. (2012). Emotional intelligence and depression: The moderator role of gender. *Personality and Individual Differences*, 53(1), 29-32. doi: 10.1016/j.paid.2012.02.006.
- Salovey, P. (2001) Applied emotional intelligence: Regulating emotions to become healthy, wealthy, and wise. In J. Ciarrochi, J. P. Forgas, & J. D. Mayer (Eds.), Emotional intelligence and everyday life (pp. 168-184). New York: Psychology Press.
- Schmidt C., Muench R., Schneider F., Breitenbach S. & Carolus A. (2018) Generation "always on" turned off. effects of smartphone separation on anxiety mediated by

the fear of missing out. In C. Stephanidis (Ed.), *Communications in computer and information science, vol 851* (pp. 436-443). Springer, Cham.

- Schreckinger, B. (2014, July 29). The home of FOMO. *Boston Magazine*. <u>https://www.bostonmagazine.com/news/2014/07/29/fomo-history/</u>Accessed 9 November 2019.
- Sette, C. P., Lima, N. R. S., Queluz, F. N. F. R., Ferrari, B. L., & Hauck, N. (2019). The online fear of missing out inventory (ON-FoMO): Development and Validation of a New Tool. *Journal of Technology in Behavioral Science*, 1-10. doi: 10.1007/s41347-019-00110-0.
- Smith, A., & Anderson, M. (2018, March 1). Social media use in 2018. <u>http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/</u> Accessed 15 November 2019.
- Tabachnick, B. G. & Fidell, L. S. (2013). *Using multivariate statistics*. Boston: Pearson.
- Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing?. *Computers in Human Behavior*, 43, 139-146. doi: <u>10.1016/j.chb.2014.10.053</u>.
- Vaughn, J. (2012). *Fear of missing out (FOMO)*. New York: J. Walter Thompson.
- Wang, P., Wang, X., Wu, Y., Xie, X., Wang, X., Zhao, F., Ouyang, M., ... Lei, L. (2018). Social networking sites addiction and adolescent depression: A moderated mediation model of rumination and self-esteem. *Personality and Individual Differences*, 127, 162-167. doi: <u>10.1016/j.paid.2018.02.008</u>.
- WeareSocial(2018).2018DigitalYearbook.<a href="https://digitalreport.wearesocial.com/download">https://digitalreport.wearesocial.com/download</a>Accessed 5 November 2019.
- Wolniewicz, C. A., Rozgonjuk, D., & Elhai, J. D. (2019). Boredom proneness and fear of missing out mediate relations between depression and anxiety with problematic smartphone use. *Human Behavior and Emerging Technologies*, 2019, 1-10. doi: 10.1002/hbe2.159.
- Yıldız, M. (2016). Üniversite öğrencilerinde duygusal zekâ yaşam doyumu ve depresyonun cinsiyet ve sınıf seviyelerine göre etkileri, OPUS – Uluslararası Toplum Araştırmaları Dergisi, 6(11), 451-474.

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