

ORIGINAL ARTICLE

The Moderating Effect of Social Emotional Learning Skills Between Differentiation of Self and Technology Addiction in Adolescents

Belgin Liman¹ , Suat Kılıçarslan² 

¹Niğde Ömer Halisdemir University, Niğde Zübeyde Hanım School of Health, Niğde, Türkiye

²Niğde Ömer Halisdemir University Faculty of Education, Niğde, Türkiye

ORCID iDs of the authors: B.L. 0000-0003-4965-2379, S.K. 0000-0002-2907-8480.

Main Points

- The current study examines the relationships between differentiation of self, social – emotional learning (SEL) skills, and technology addiction.
- First of all, it was determined that self-differentiation and technology addiction in adolescents were negatively related.
- The results show that differentiation of self in adolescents is related to SEL skills.
- Social – emotional learning has a moderating effect on the relationship between self-differentiation and technology addiction.
- The current study shows that developing the self through SEL may be a reliable and practical way to effectively address the problem of technology addiction in adolescents.

Abstract

The aim of this study is to examine the moderating effect of social emotional learning skills between differentiation of self and technology addiction in adolescents. The research was conducted with high school students in a city center in Central Anatolia in the 2022 – 2023 academic year. A total of 608 high school students, 404 girls and 204 boys, participated in the research. The average age of the participants is 15.5. Differentiation of Self, Technology Addiction, and Social Emotional Learning Skills Scale were used as measurement tools. Pearson correlation coefficient and regression analyses were used to analyze the data obtained. The Process Macro (model-1) was used to determine the moderation effect in data analysis. As a result of the correlation analysis, it was seen that there was a significant relationship between differentiation of self, social emotional learning skills and technology addiction in adolescents. According to the moderator analysis results, it was seen that self-differentiation in adolescents predicted technology addiction and social emotional learning skills had a moderating effect between self-differentiation and technology addiction in adolescents.

Keywords: Adolescence, differentiation of self, social emotional learning skills, technology addiction

Sorumlu Yazar: Belgin Liman E-posta: belgin.liman@gmail.com

Received: May 14, 2024

Revision Requested:

November 15, 2024

Last Revision Received:

December 3, 2024

Accepted: January 20, 2024

Publication Date: June 12, 2025

Introduction

Adolescence is a period in which the individual experiences rapid changes in physical, cognitive, emotional, and social areas (Steinberg, 2007), and is marked by the acquisition of identity, autonomy, and productivity (Parlaz et al., 2012). It is a critical developmental process. While the formation of a positive identity and sense of self in the adolescent makes

experiences positive, a negative sense of identity can pave the way for the emergence of behavioral problems. Especially, the role confusion experienced in identity acquisition causes conflicts and problems in family and friend relationships; it can cause internalized symptoms such as introversion, loneliness, reluctance, fear of being disliked, and disapproval (Parlaz et al., 2012). Especially in this period, the increase in emotional problems and the use of the internet and



Copyright © Author(s) – Available online at <https://www.addicta.com.tr/EN>.

Content of this journal is licensed under a Creative Commons Attribution (CC BY) 4.0 International License.

Cite this article as: Liman, B., & Kılıçarslan, S. (2025). The moderating effect of social emotional learning skills between differentiation of self and technology addiction in adolescents. *Addicta: The Turkish Journal on Addictions*, 12(2), 205-211.

social media have come to the fore in recent years as a means of coping with these problems. It is seen that the correct use of technology makes life much easier, but some negative behaviors such as ‘addiction’ occur due to uncontrolled and excessive use (Ryan et al., 2014). Social media and internet addiction threaten adolescents the most today (Echeburua & De Corral, 2010). Internet and social media are at the center of the daily lives of adolescents who are searching for identity and trying to know themselves. The literature shows that there is a negative relationship between self-differentiation and technology, social media, and internet addiction (Park & Park, 2017; Sotero et al., 2019). However, there is a paucity of information about how technology and social media use during adolescence affects social and emotional functions (Vannucci & Ohannessian, 2019), and it is thought that the excessive use of technological devices may be related to individuals’ social – emotional learning (SEL) skills. As a matter of fact, during the screenings, studies were found that demonstrated a negative relationship between SEL skills and Facebook addiction (Aftab et al., 2015) and internet addiction (Oh & Park, 2016).

In recent years, the increase in research on technology, internet, and social media addiction is important in terms of determining the dynamics affecting addiction and intervention studies. However, it is thought that a more detailed investigation of SEL skills, which are believed to affect the development of healthy self-differentiation in adolescent individuals, may contribute to the literature. For this reason, in this study, considering that there is a relationship between differentiation of self and technology addiction in adolescents, the moderating effect of SEL skills on these variables was investigated.

Literature Review

Technology Addiction

Behavioral addiction, which does not involve chemical addiction but involves machine – human interaction, is defined as technology addiction (Arısoy, 2009). Digital games that support and affect technology addiction include active behaviors such as internet and social media use or passive behaviors such as television. While some researchers in the literature mention that the use of technology contributes to adolescent development (Yıldırım, 2014), on the contrary, some argue that it may pose a risk for the adolescent as virtual relationships replace real relationships in the identity formation process (Odacı & Çıkrıkçı, 2017). However, although their purposes of use vary, it is reported that the popularity of internet and social media applications, which are easy to use and do not require any cost, is increasing day by day among adolescents (Elitaş, 2020). In a study conducted with adolescents aged 14 – 17 in seven European countries (Tsitsika et al., 2014), they determined that the risk of internet addiction was 12.7% and the prevalence of internet addiction was 1.2%. This situation is similar in Türkiye. It points out that internet usage in Türkiye is 59.6% in the 16 age group (TÜİK, 2018). Another study revealed that more than 85% of adolescents aged 12 – 17 are social media users and that these young people prefer to use social media instead of face-to-face communication (Elmalı, 2020). Evidence shows that internet and social media addiction rates have reached alarming levels. Therefore, in this study, one of the variables considered and thought to be an explanation of internet and social media addiction is the concept of differentiation of self in adolescent individuals.

Differentiation of Self in Adolescents

Bowen (1978) conceptualizes adolescence as the period in which individuals reach a more differentiated or mature self. Differentiation is a process that involves intrapsychic and interpersonal components that exist to balance the individual’s two dialectical life forces (autonomy and healthy relationships with others). This concept, which is also described as separation-individuation in the context of self and is necessary for the development of the individual, involves two different progressions that interact with each other and include different symptoms and behaviors. Separation refers to the child’s separation from the common life phase with his/her mother, while individuation refers to the child’s separation from the common life phase, becoming aware of his/her own distinctive features and achieving gains in this regard. The child’s separation from his parents is associated with self-knowledge and awareness. The process allows the adolescent to create a unique sense of self (Sabaka, 2009). According to Bowen’s family systems model (Kerr & Bowen, 1988), self-differentiation is based on the individual’s development of self-regulation capacity in internal and interpersonal dimensions. Self-differentiation in the internal dimension involves regulating emotional reactivity in order to establish prosocial and intentional relationships with others; in the interpersonal dimension, it includes the ability to create a solid and flexible sense of self while maintaining closeness and relationships with people. According to Bowen (1978), highly differentiated individuals can establish relationships with other people without losing their sense of self, convey their emotions to other individuals in a balanced manner, and maintain healthy interpersonal relationships (Kerr & Bowen, 1988). In addition, differentiated individuals are adaptable and flexible, successful in coping with stress, and maintaining a sense of autonomy in their relationships, as well as functioning on an emotional and rational level (Duch-Ceballos et al., 2021). On the contrary, people with low self-differentiation tend to become entangled with others or experience emotional detachment (Kerr & Bowen, 1988). They depend on others in their actions and have difficulty taking action by thinking on their own, without the opinions of others. According to some researchers, extraordinary life experiences and therapeutic efforts to increase differentiation may cause some changes in differentiation (Kerr & Bowen, 1988). In this context, another concept discussed in this study and thought to have an impact on the healthy self-differentiation of adolescents is SEL skills, which have been developing since childhood.

Social – Emotional Learning Skills

Social – emotional learning is expressed as developing skills such as knowing the individual’s weaknesses and strengths, recognizing their own emotions and the emotions of others, regulating and expressing emotions, and establishing and maintaining effective communication (CASEL, 2020). Social – emotional learning skills were first put forward by the CASEL organization (Collaborative to Advance Social and Emotional Learning), which took action in 1994. Social – emotional learning refers to the multifaceted development of the individual and helps the individual cooperate and learn effectively; it is defined as the whole of abilities such as self-esteem, coping with stress, problem solving, and communication, which have an important share in success in business, society, and family life and support academic success (Elias et al., 2006). Social emotional learning

skills were discussed in five dimensions. These are effective decision-making, self-awareness, social awareness, self-management, and relationship skills. These dimensions emphasize the importance of developing individual competencies such as interpersonal skills and social awareness. The social content of these skills includes developing positive relationships and maintaining developing relationships, and the emotional content includes self-awareness and cognition and thought of emotions within the self (Merrell & Gueldner, 2010). These skills enable adolescents to feel valued, to be aware of their feelings and needs, and to develop a positive self-image by making them aware of their own characteristics (Apaydin Demirci et al., 2022). An increasing number of studies show a negative relationship between self-esteem and internet and social media addiction (Malo-Cerrato et al., 2018), as well as a negative relationship between SEL skills and Facebook (Aftab et al., 2015) and internet addiction (Çeliker, 2020). It reports that there is a relationship. Therefore, it is assumed that SEL skills have a regulatory role in the relationship between self-differentiation and technology addiction in adolescents.

Current Study

In recent years, there has been a remarkable change and transformation in interpersonal communication, especially with technological developments in access to information and the rapid proliferation of social media platforms (WhatsApp, Facebook, Instagram, or Twitter). In the social process, social interaction with people contributes to the adolescent individual's personality development and self-perception formation. However, due to the influence of technology, the decrease in face-to-face communication between people and the gradual transfer of communication to the virtual environment cause the social and emotional structure of individuals to deteriorate. Increasing technology addiction among adolescents is associated with many maladaptive developmental outcomes and therefore raises concern in many countries. For this reason, examining the variables that can be associated with technology addiction will undoubtedly support the identification, prevention, and treatment processes of the problem. In addition, a structural model testing the mediation of SEL skills in the relationship between self-differentiation and internet and social media addiction in adolescents has not been found in the literature. It is thought that this study will contribute to the literature in this respect. It is expected that the findings obtained as a result of the research will guide and serve as a resource for psychological counselors in psychotherapeutic intervention studies with adolescents. In this study, a model was created that suggests that SEL skills have a moderating effect on the relationship between differentiation of self and technology addiction in adolescents. In this context, answers were sought to the following research questions:

H₁. There are significant relationships between self-differentiation, technology addiction and SEL skills in adolescents.

H₂. Social emotional learning skills have a regulatory role between self-differentiation and technology addiction in adolescents.

Within the scope of moderator analysis, the research model was created as follows (Figure 1):

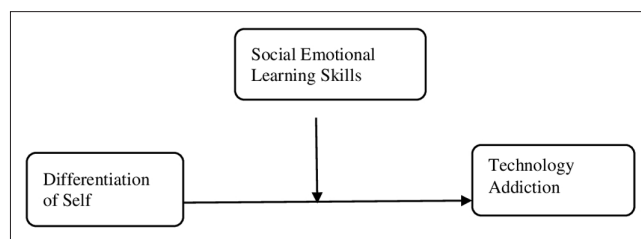


Figure 1. Moderated/Conceptual Model.

Material and Methods

Participants

The research was conducted in secondary schools located in a city center in the Central Anatolian region of Türkiye. A total of 608 adolescents who met the inclusion criteria and volunteered to participate in the study were included. Of the participants, 404 (66.4%) of the participants were female, and 202 (33.6%) were male. The ages of the participants ranged from 13 to 18 (Mean: 15.53). The literature suggests that a sample size of at least 384 is required for populations consisting of a large number of individuals (Pourhoseingholi et al., 2013). The aim of this study was to reach 384 adolescents, and the study was conducted with 608 adolescents. The convenience sampling method was used in sample selection (Table 1).

Instruments

Social and Emotional Learning Scale in Adolescents

It was developed by Totan (2018) to measure the emotional and social learning skills of adolescents. The test is a 5-point Likert type and consists of 23 items and a five-factor structure. Within the scope of the scale, the minimum score is 23 and the maximum is 115. A high score on the entire scale indicates a high level of SEL skills. When the factor loadings of the dimension items are examined, the self-awareness dimension is between 0.47 and 0.81, the responsible decision-making dimension is between 0.46 and 0.84, the social awareness dimension is between 0.51 and 0.77, the self-control dimension is between 0.60 and 0.75, and the relationship skills dimension is between 0.46 and 0.84. It was determined that it varied between 0.47 and 0.75. Within the scope of the reliability studies of the scale, the Cronbach α coefficient calculated for the total test was found to be 0.92. Cronbach's α value for the entire scale for the study was calculated as 0.85.

Digital Addiction Scale

The test was developed to measure the level of digital addiction in individuals (Arslan et al., 2015). It is a 29-item Likert-type scale rated from 1 to 5. The highest score on the test is 145, and the lowest score is 29. High scores on this scale indicate a high tendency towards digital addiction is high. Cronbach's α value of the digital addiction scale was determined to be 0.89. Cronbach's α value for the entire scale for the study was calculated as 0.90.

Differentiation of Self Short Form

The inventory (BFE-KF) was developed to determine the self-differentiation levels of individuals (Drake et al., 2015) and the scale adaptation was made by (Sarıkaya et al., 2018). It consists of a total of 20 items and four subscales: taking an ego position, emotional reactivity, emotional detachment, and enmeshment. In adaptation studies of the scale, Cronbach's α internal consistency

Table 1.
Socio-Demographic Data

Variables	%	<i>n</i>	Variables	(%)	<i>n</i>
Sex			Father educational level		
Male	33.6	204	Primary school	14.6	89
Female	66.4	404	Elementary school	22.4	136
Age (13 – 18)	Mean	15.5	High school school	33.1	201
Grade level			Undergraduate/associate degree	29.9	182
9	43.9	267	Mother educational level		
10	32.4	197	Primary school	23.5	143
11	23.7	144	Elementary school	24.5	149
Perceived income level			High school school	32.07	195
Low	5.9	36	Undergraduate/associate degree	19.9	121
Medium	80.6	490			
High	13.5	82			

coefficients were calculated as 0.61 for the ego-taking dimension, 0.80 for the emotional reactivity dimension, 0.78 for the emotional detachment dimension, 0.70 for the enmeshment dimension, and 0.83 for the whole scale. Each item in the scale receives a score between 1 (does not reflect me at all)—6 (reflects me very much). It consists of three items for emotional detachment, six items for emotional reactivity, five items for enmeshment, and six items for self-position. In the study, Cronbach's α value for the entire scale was calculated as 0.79.

Socio-Demographic Data Form

This form was developed to determine socio-demographic data. This form includes information such as sex, grade level, age, parents' education level, and perceived income level.

Collection of Data

Necessary legal permissions and official research approval were obtained from the Ethics Committee of Niğde Ömer Halisdemir University Ethics Committee Commission (Decision No: 08/03, Date: 01.06.2023) to collect research data. In this context, the scales were administered to students by researchers in the fall semester of the 2022 – 2023 academic year. During data collection, the purpose of the research was explained to school administrators and students, and care was taken to provide an appropriate environment and time for them to answer the scales. After the necessary explanations for the surveys were made, the tests were filled out by the students under the supervision of the authors, and the answering process took an average of 45 minutes.

Data Analysis

The current study aimed to determine the relationships between predictor and moderator variables. In this context, first the homogeneity of the data was checked, and then the correlational relationships between the variables were tested. The skewness value (−0.09 to 0.07) and kurtosis value (−0.38 to 0.24) in this data set were found, and since these data were close to ± 1 , it was seen that the distribution was normal (Tabachnick & Fidell, 2013). According to the Mahalanobis technique, 14 data points with extreme values were identified and removed from the data set. Then, correlation analysis was conducted to determine

whether there was a significant relationship between differentiation of self, technology addiction and SEL skills in adolescents. Finally, the moderating effect of SEL skills between differentiation of self and technology addiction was examined. In moderation analysis, the *Z* variable has a power that affects the strength of the relationship between *X* and *Y*. Moderation analysis was conducted with Process Macro (Model 1) (Hayes, 2013) and this relationship was accepted as $p < .05$. At the end of the study, the power of the study was calculated as 0.99 in the power analysis performed with GPower.

Ethical Considerations

Ethics Committee approval was obtained from Ethics Committee of Niğde Ömer Halisdemir University Ethics Committee Commission (Decision No: 08/03, Date: 01.06.2023) and necessary permissions were obtained from the relevant institutions for this study. The study was conducted in accordance with the Declaration of Helsinki. Informed consent forms were obtained from adolescents and their parents before the study. Before the research, students were informed that filling out the survey was voluntary and that the data would be used only for scientific purposes.

Results

Preliminary Analyses

Correlation analysis results revealed that there is a negative and significant relationship between self-differentiation and technology addiction in adolescents. Additionally, there is a positive and significant relationship between differentiation of self and SEL skills. However, it was determined that technology addiction and SEL skills were negatively related (Table 2).

Moderation Analysis

In the next stage, the regulatory effect was tested using Model-1 (Hayes, 2013). At this stage, differentiation of self (*X*) in adolescents was defined as a predictor. Social-emotional learning acts as a moderator (*M*) and technology addiction in adolescents is the outcome (*Y*) (Figure 2). Conducting moderation analysis showed that adding a moderator variable between differentiation

Table 2.
Correlations ($H_{1,2}$)/Descriptive Statistics

Variables	DS	TA	SEL	X	SD	Skewness	Kurtosis
DS	1			70.29	16.23	-0.02	-0.30
TA	-0.211*	1		84.80	20.68	0.07	-0.24
SEL	0.131*	-0.197*	1	80.91	12.58	-0.09	-0.38

Note: DS = Differentiation of self; SEL = Social emotional learning skills in adolescents; TA = Technology addiction.
* $p < .001$.

of self and technology addiction in adolescents had a 1% effect on the variance of SEL (Table 3). This demonstrated that SEL makes a significant contribution. This study used 5000 bootstrapped resamples with a 95% CI. If there is no zero in the CI, it can be said that there is a significant moderating effect. Moderation analysis results show that adolescent individuals with higher SEL skills affect the relationship between self-differentiation and technology addiction in adolescents more than those with lower SEL skills (Figure 2). In other words, individuals with higher SEL skills show less technology addiction and show us that self-differentiation may be greater. According to these results, it can be said that increasing the SEL skills of adolescent individuals, who are going through a critical period in terms of development, can make significant contributions to developing a healthy self-differentiation and moving away from technology addiction.

Discussion

The intensive use of technological tools and equipment affects the self-development and social and emotional skills of individuals, especially during the adolescent development period. For this reason, this study aimed to examine the moderating effect of SEL skills between self-differentiation and technology addiction in adolescents. According to the research findings, it was first determined that there was a negative relationship between the differentiation of self and technology addiction in adolescents. When the literature is examined, this finding is supported by previous similar studies (Park & Park, 2017; Sotero et al., 2019). Sotero et al. (2019) revealed that low self-differentiation

is associated with a higher level of Facebook addiction in adolescents. In their study, Park and Park (2017) determined that as self-differentiation increases, students’ smartphone addiction decreases. According to Bowen, individuals with a high level of differentiation can manage their anxiety better, use social problem-solving skills more effectively, and experience fewer physical, emotional, and social symptoms in their lives (Bowen, 1978). It is also mentioned that individuals with a high level of self-differentiation have emotional intelligence, which includes appreciating their inner knowledge and emotions while recognizing and empathizing with the emotions of others. Therefore, the research and theoretical explanations seem to support the results of this research. In this case, it can be said that the development of self-differentiation in adolescence is an important variable affecting technology addiction.

Another finding of our study is that the differentiation of self in adolescents is related to SEL skills. Merter (2013) found in his study that there is a significant and positive relationship between the social skills of young people with high self-esteem. In this context, positive self-development ensures that the individual’s social relationships progress in a positive direction (Harris & Orth, 2020). Current scientific literature explains SEL skills as vital skills that enable adolescents to manage emotional processes correctly, enjoy the relationships they establish in social life, and improve the quality of life (Merter, 2013; Apaydin Demirci et al., 2022). It is suggested that these skills will help adolescents develop a positive self-image by making them feel valuable and aware of their feelings and needs (CASEL, 2020). In addition, research findings showing a decrease in undesirable behaviors as a result of improving SEL skills are frequently encountered in the literature. For example, in the study conducted by Durlak et al. (2010), it was determined that as a result of increasing students’

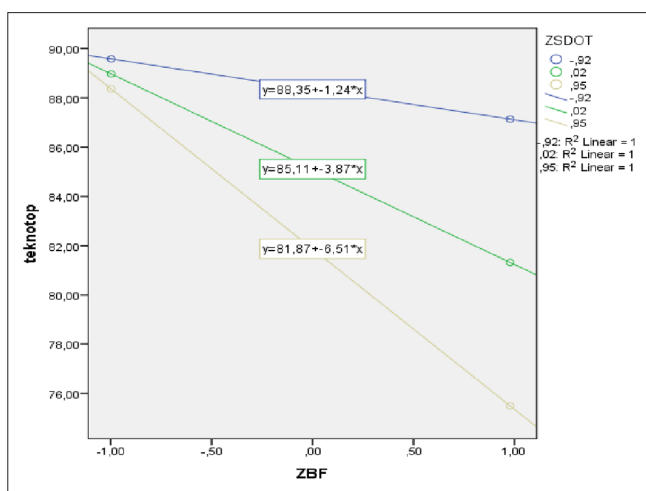


Figure 2. Association Between Technology Addiction and Differentiation of Self as Moderated by the Social Emotional Learning (H_3).

Table 3.
Moderation Analysis Results

Predictors	Model 1 (Technology Addiction)			
	β	t	SE	95% CI
Constant	85.17	105.21***	0.81	83.58 86.76
DS	-3.83	-4.66***	0.82	-5.44 -2.22
SEL	-3.47	-3.97***	0.88	-5.19 -1.75
DS \times SEL	-2.83	-3.19***	0.89	-4.57 -1.09
R^2	0.08			
F	19.748***			

Note: DS = Differentiation of self; SEL = Social emotional learning skills in adolescents.
*** $p < .001$.

SEL skills, self-perception and positive social behaviors increased significantly and problematic behaviors decreased. Therefore, it can be said that social emotional skills play an important role in positive self-differentiation in adolescence.

Another hypothesis of the research is to examine the moderating effect of SEL skills on the relationship between differentiation of self and technology addiction. According to the results obtained from the analyses, it was concluded that SEL skills moderated the relationship between differentiation of self and technology addiction in adolescents. According to the resulting data, individuals with higher SEL skills are positively affected by self-differentiation and tend to be less technology addicted. Little is known about individuals' social media usage patterns during adolescence and how these patterns affect their social and emotional functions (Vannucci & McCauley Ohannessian, 2019).

However, it is suggested that the level of technology and social media usage may be related to individuals' SEL. For example, Aftab et al. (2015) determined in their study with high school students that internet and Facebook addiction negatively predicted SEL at a significant level. Similarly, Raiisi et al. (2020) documented in their study that there is a significant negative relationship between internet addiction and social skills and emotional intelligence. Again, Chen et al. (2021) determined that SEL competence and problematic internet use were negatively related, and ultimately demonstrated the necessity of developing SEL programs to reduce internet abuse in adolescents.

In line with the results of this study, it can be said that increasing the SEL skills of adolescent individuals, who are going through a critical period in terms of development, can make significant contributions to developing a healthy self-differentiation and moving away from technology addiction. In this sense, it can be stated that, in order to prevent or eliminate technology addiction, which is one of the most important problems of today, individual or group psychological counseling practices aimed at increasing the SEL skills of children and adolescents in schools can make significant contributions to adolescent individuals who are going through an intense development process. It is recommended that awareness studies with broader participation be conducted in schools, especially by school psychological counseling and guidance services, on self-integrity, technology use, and social and emotional skills. In addition, preventive and therapeutic individual psychological counseling practices can be very useful for students who have developed an addiction to technology. Furthermore, it can be said that family counseling practices and preventive psychological counseling studies can make significant contributions to supporting identity and self-development during adolescence and contributing to the separation from the family and differentiation of the self.

The results of the study in question should be carefully considered within the framework of its limitations. First of all, the data of the study were collected from a limited number of participants who attended high school in a city center in Central Anatolia in the 2022 – 2023 academic year. For this reason, the results obtained from this study can be generalized to participants with similar characteristics. However, in today's world, where the use of technology spreads very quickly and life changes very rapidly,

conducting similar research in different subcultures in Türkiye and in different parts of the world can make significant contributions to the literature in terms of comparing the results. In addition, this study focused on adolescents with a cross-sectional research method. Conducting longitudinal studies where we can observe the effects of the study in different developmental periods can also provide important findings about the course of the problem over time.

Data Availability Statement: Data supporting the results of the present study will be made available from the corresponding author upon reasonable request.

Ethics Committee Approval: Ethics committee approval was obtained from the Niğde Ömer Halisdemir University Ethics Committee Commission (Decision No: 08/03, Date: 01.06.2023).

Informed Consent: Written informed consent was obtained from the from the participants and parents of the participants who agreed to take part in the study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept B.L., S.K.; Design – B.L., S.K.; Supervision – B.L., S.K.; Resources – B.L., S.K.; Materials – B.L., S.K.; Data Collection and/or Processing – S.K., B.L.; Analysis and/or Interpretation – S.K., B.L.; Literature Search – B.L., S.K.; Writing – B.L., S.K.; Critical Review – B.L., S.K.

Declaration of Interests: The authors have no conflict of interest to declare.

Funding: The authors declared that this study has received no financial support.

References

- Aftab, R., Çelik, İ., & Sarıçam, H. (2015). Facebook addiction and social emotional learning skills. *Ozean Journal of Social Science*, 8(2), 109 – 120.[CrossRef]
- Apaydin Demirci, Z., Yıldız Bıçakçı, M., & Uysal, B. (2022). Investigation of the effect of social emotional learning on peer relationships of adolescents. *Journal of Education and Future*, (21), 1 – 13.[CrossRef]
- Arısoy, Ö. (2009). İnternet bağımlılığı ve tedavisi. *Psikiyatride Güncel Yaklaşımlar*, 1(1), 55 – 67. <http://www.cappsy.org/archives/vol1/>
- Arslan, A., Kırık, A. M., Karaman, M., & Çetinkaya, A. (2015). Lise ve üniversite öğrencilerinde dijital bağımlılık. *Uluslararası Hakemli İletişim ve Edebiyat Araştırmaları Dergisi*, 8(8), 34 – 58.
- Bowen, M. (1978). *Klinik pratikte aile terapisi*. New York: Jason Aronson.
- CASEL (2020). *CASEL's District Resource Center*. Chicago, IL: Author. <https://drc.casel.org/>
- Çeliker, V. B. (2020). 6. ve 7. sınıf öğrencilerinin internet bağımlılığı ile sosyal beceri düzeyleri arasındaki ilişki [Yüksek Lisans Tezi]. İstanbul: Lisansüstü Eğitim Enstitüsü. Maltepe Üniversitesi.
- Chen, C., Yang, C., & Nie, Q. (2021). Social-emotional learning competencies and problematic internet use among Chinese adolescents: A structural equation modeling analysis. *International Journal of Environmental Research and Public Health*, 18(6), 3091.[CrossRef]
- Drake, J. R., Murdock, N. L., Marszalek, J. M., & Barber, C. E. (2015). Differentiation of self-inventory—short form: development and preliminary validation. *Contemporary Family Therapy*, 37(2), 101-112.
- Duch-Ceballos, C., Oliver Pece, J., & Skowron, E. (2021). Differentiation of self and its relationship with emotional self-regulation and anxiety in a Spanish sample. *American Journal of Family Therapy*, 49(5), 517 – 533.[CrossRef]

- Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, 45(3-4), 294-309. [CrossRef].
- Echeburua, E., & De Corral, P. (2010). Addiction to new technologies and to online social networking in young people: A new challenge. *Adicciones*, 22 (pp. 91-95).
- Elias, M. J., O'Brien, M. U., & Weissberg, R. (2006). Transformative leadership for social emotional learning. *Principal Leadership*, 7(4), 10-13.
- Elitaş, S. K. (2020). Sosyal medyanın toplumsal dönüştürücülüğü: Sosyal medya kullanan ergenlerin aile içi iletişim süreçlerine katılım düzeyleri üzerine nicel bir araştırma. *Opus International Journal of Society Researches*, 16(30), 2616-2632. [CrossRef]
- Elmalı, F. (2020). Sosyal ağ siteleri: Ergenler, riskler ve tehditlerden korunma stratejileri. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 20(1), 439-453. [CrossRef]
- Harris, M. A., & Orth, U. (2020). The link between self-esteem and social relationships: A meta-analysis of longitudinal studies. *Journal of Personality and Social Psychology*, 119(6), 1459-1477. [CrossRef]
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press. [CrossRef]
- Kerr, M. E., & Bowen, M. (1988). *Family evaluation: An approach based on Bowen theory*. W W Norton & Company.
- Malo-Cerrato, S., Martín-Perpiñá, M. M., & Viñas-Poch, F. (2018). Excessive use of social networks: Psychosocial profile of Spanish adolescents. *Comunicar*, 26(56), 101-110. [CrossRef]
- Merrell, K. W., & Gueldner, B. A. (2010). *Social and emotional learning in the classroom: Promoting mental health and academic success*. New York: The Guilford Press.
- Merter, K. (2013). *Ortaokul öğrencilerinin sosyal duygusal öğrenme becerileri ve benlik saygısı arasındaki ilişkinin incelenmesi*. Maltepe İlçesi Örneği [Yayımlanmamış Yüksek Lisans Tezi]. İstanbul: Yeditepe Üniversitesi.
- Odacı, H., & Çakırkçı, Ö. (2017). Problemlerle internet kullanımında depresyon [kayıgı ve stres düzeyine dayalı farklılıklar]. *Addicta: The Turkish Journal on Addictions*, 4(1), 41-61. <https://doi.org/10.15805/addicta.2017.4.1.0020>
- Oh, E. J., & Park, S. A. (2016). Study on the effect of self-differentiation, stress coping and interpersonal relationship ability of university students on mobile phone addiction. *Journal of Humanities and Social Science* 21, 7(2), 159-184. [CrossRef]
- Park, S. A., & Park, K. W. (2017). The mediating effect of self-differentiation between college student's family functioning and smart phone addiction. *Journal of the Koreaacademia-Industrial Cooperation Society*, 18(4), 325-333. [CrossRef]
- Parlaz, E. A., Tekgül, N., Karademirci, E., & Öngel, K. (2012). Ergenlik dönemi: Fiziksel büyüme, psikolojik ve sosyal gelişim süreci. *Turkish Family Physician*, 3(4), 10-16.
- Pourhoseingholi, M. A., Vahedi, M., & Rahimzadeh, M. (2013). Sample size calculation in medical studies. *Gastroenterology and Hepatology from Bed to Bench*, 6(1), 14-17.
- Raïsi, F., Hâjîkaram, A., Tehrani Zadeh, M., & Bakhshi, F. (2020). The role of social skills & emotional intelligence in predicting internet addiction among university students. *Shenakht Journal of Psychology and Psychiatry*, 7(4), 93-104. [CrossRef]
- Ryan, T., Chester, A., Reece, J., & Xenos, S. (2014). The uses and abuses of Facebook: A review of Facebook addiction. *Journal of Behavioral Addictions*, 3(3), 133-148. [CrossRef]
- Sabaka, S. M. (2009). Psychometric integrity of a measure of dysfunctional separation-individuation in young adolescents. (Doctoral Thesis, Ball State University, Indiana). https://cardinalsolar.bsu.edu/bitstream/handle/123456789/193393/Ssabaka_2009-2_BODY.pdf?sequence=1&isAllowed=y
- Sarıkaya, Y., Boyacı, M., İlhan, T., & Aldemir, A. (2018). Adaptation of the differentiation of self inventory short form (DSI-SF) to Turkish: Validity and reliability study. *Bartın University Journal of Faculty of Education*, 7(2), 365-380. [CrossRef]
- Sotero, L., Ferreira da Veiga, G. F., Carreira, D., Portugal, A., & Relvas, A. P. (2019). Facebook Addiction and Emerging Adults: The influence of sociodemographic variables, family communication, and differentiation of self. *Escritos de Psicologia - Psychological Writings*, 12(2), 81-92. [CrossRef]
- Steinberg, L. (2007). *Ergenlik F. Çok (Çev)*. İstanbul: İmge Yayınları.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Pearson.
- Totan, T. (2018). Ergenlerde sosyal ve duygusal öğrenme ölçeğinin geliştirilmesi. *Eğitim Bilimleri Dergisi*, 48(48), 41-58. [CrossRef]
- Tsitsika, A., Janikian, M., Schoenmakers, T. M., Tzavela, E. C., Olafsson, K., Wójcik, S., Macarie, G. F., Tzavara, C., & Richardson, C., Tzavara, C., & Richardson, C. (2014). Internet addictive behavior in adolescence: A cross-sectional study in seven European countries. *Cyberpsychology, Behavior and Social Networking*, 17(8), 528-535. [CrossRef]
- Türkiye İstatistik Kurumu (2018). Hane halkı bilişim teknolojileri kullanım araştırması. <http://www.tuik.gov.tr/PreHaberBultenler.i.doid=21779>
- Vannucci, A., & McCauley Ohannessian, C. (2019). Social media use subgroups differentially predict psychosocial well-being during early adolescence. *Journal of Youth and Adolescence*, 48(8), 1469-1493. [CrossRef]
- Yıldırım, A. (2014). İnternetin görünen yüzü. *Karamanoğlu Mehmetbey Üniversitesi Sosyal ve Ekonomik Araştırmalar Dergisi*, 2014(3), 51-59. [CrossRef]

Geniřletilmiř Özet

Ergenlerde Benlięin Farklılařması ile Teknoloji Baęımlılıęı Arasında Sosyal Duygusal Öęrenme Becerilerinin Düzenleyici Etkisi

Giriř

Ergenlik dönemi, bireyin fiziksel, biliřsel, duygusal ve sosyal alanda hızlı deęiřimler yařadığı, bireyin kimlięini, özerklięini, üretkenlięini kazanması ile son bulan kritik bir geliřim sürecidir. Ergende olumlu bir kimlik ve benlik duygusu oluřması, yařantıları olumlu hale getirirken, olumsuz kimlik duygusu davranıř sorunlarının ortaya çıkmasına zemin hazırlayabilmektedir. Kimlik arayıřında olan ve kendilerini tanımaya çalıřan ergenlerde internet ve sosyal medya günlük yařamlarının merkezinde yer almaktadır. Teknolojinin doęru kullanımının yařamı oldukça kolaylařtırdığı, ancak kontrolsüz ve ařırı kullanımına baęlı olarak “baęımlılık” gibi bazı olumsuz davranıřlar ortaya çıktığı görülmektedir. Sosyal medya ve internet baęımlılıęı günümüzde en çok ergenleri tehdit etmektedir. Literatür, benlik saygısı ile teknoloji, internet ve sosyal medya baęımlılıęı arasında negatif bir iliřki olduęunu göstermektedir. Ancak ergenlik dönemindeki teknoloji ve sosyal medya kullanımının sosyal ve duygusal iřlevleri nasıl etkiledięi hakkındaki bilgi azlığı söz konusudur ve ařırı ölçüde teknolojik araç gereçleri kullanmanın bireylerin sosyal duygusal öęrenme becerileri ile ilgili olabileceęi düşünölmektedir. Teorik çerçevede, sosyal ve duygusal öęrenme becerilerinin sosyal içerięi olumlu iliřkiler geliřtirme ve bu geliřen iliřkileri korumayı, duygusal içerięi ise öz-farkındalık ve benlik dâhilinde duyguların biliř ve düşünce içerięini kapsamaktadır. Bu beceriler, ergenlerin biliř, duygu ve davranıřları arasında etkileřimi saęlayarak onların geliřimsel görevlerini yerine getirmelerine ve geliřimsel zorluklarla bař etmelerini saęlayan, ergen geliřimini destekleyen ve kolaylařtıran bir özellik olarak görölmektedir.

Son yıllarda, özellikle bilgiye eriřimdeki teknolojik geliřmeler ve sosyal medya platformlarının (WhatsApp, Facebook, Instagram veya Twitter) hızla çoęalmasıyla, kiřilerarası iletiřimde dikkat çekici bir deęiřim ve dönüřüm yařanmaktadır. Arařtırmacılar, insanlarla sosyal etkileřimde bulunmanın ergen bireyin kiřilik geliřimine ve benlik algısı oluřumuna katkı saęladığını savunmaktadırlar. Ancak teknolojinin etkisiyle insanlar arasındaki yüz yüze iletiřimin azalması ve iletiřimin giderek sanal ortama tařınması, bireylerin sosyal ve duygusal yapısının bozulmasına neden olmaktadır. Ergenler arasında yaygınlařan teknoloji baęımlılıęı, birçok uyumsuz geliřimsel sonuçla iliřkilidir ve bu nedenle birçok ölkede endiře yaratmaktadır. Bu sebeple, teknoloji baęımlılıęı ile iliřkilendirilebilecek deęiřkenlerin incelenmesi, hiç řüphesiz sorunun tanımlanma, önleme ve tedavi süreçlerine destek olacaktır. Bu baęlamda, bu çalıřmada ergenlerde benlięin farklılařması ile teknoloji baęımlılıęı arasındaki iliřki olduęu düşünölmektedir, sosyal duygusal öęrenme becerilerinin bu iliřki üzerindeki aracılık rolü arařtırılmıřtır.

Yöntem

Arařtırma, 2022 – 2023 eęitim-öęretim yılında Orta Anadolu’da bir şehir merkezindeki lise öęrencileri ile yürütölmüřtür. Arařtırmaya 404 kız ve 204 erkek olmak üzere toplam 608 lise öęrencisi katılmıřtır. Katılımcıların yař ortalaması 15.5’tir. Ölçme aracı olarak benlięin farklılařması, teknoloji baęımlılıęı ve sosyal duygusal öęrenme becerileri ölçęęi kullanılmıřtır.

Arařtırmada yordayıcı ve moderatör deęiřkenler arasındaki iliřkilerin belirlenmesi amaçlanmıřtır. Bu kapsamda ilk olarak deęiřkenler arasındaki iliřkiye bakılmıř ve öncelikle verilerin homojenlięi test edilmiřtir. Bu veri setindeki çarpıklık deęeri (-.09 ila .07) ve basıklık deęeri (-.38 ila -.24) çıkmıř ve bu veriler ± 1 e yakın olduęundan daęılımın normal olduęu görölmüřtür. Mahalanobis teknięine göre uç deęere sahip 14 adet veri tespit edilmiř ve veri setinden çıkarılmıřtır. Daha sonra ergenlerde benlięin farklılařması, teknoloji baęımlılıęı ve sosyal duygusal öęrenme becerileri arasında anlamlı bir iliřki olup olmadığını belirlemek amacıyla korelasyon analizi yapılmıřtır. Son olarak da sosyal duygusal öęrenme becerilerinin benlięin farklılařması ile teknoloji baęımlılıęı arasındaki moderatör etkisi incelenmiřtir. Moderasyon analizinde Z deęiřkeni X ve Y arasındaki iliřkinin gücünü etkileyen bir güce sahiptir. Moderasyon analizi Process Macro (Model 1) ile yapılmıř ve bu iliřki $< .05$ olarak kabul edilmiřtir.

Bulgular

Yapılan korelasyon analizi sonucunda ergenlerde benlięin farklılařması, sosyal duygusal öęrenme becerileri ve teknoloji baęımlılıęı arasında anlamlı bir iliřkinin olduęu görölmüřtür. Moderatör analizi sonuçlarına göre ise ergenlerde benlik farklılařmasının teknoloji baęımlılıęını yordadığı, bununla birlikte ergenlerde benlięin farklılařması ile teknoloji baęımlılıęı arasında sosyal duygusal öęrenme becerilerinin düzenleyici etkisi olduęu görölmüřtür.

Bir sonraki ařamada düzenleyici etki Model-1 kullanılarak test edilmiřtir (Hayes, 2013). Bu ařamada ergenlerde benlięin farklılařması (X) yordayıcı olarak tanımlandı. Sosyal duygusal öęrenme moderatör (M) görevi görmekte ve ergenlerde teknoloji baęımlılıęı ise sonuçtur (Y). Moderasyon analizinin yapılması, ergenlerde benlięin farklılařması ile teknoloji baęımlılıęı arasında moderatör bir deęiřken eklemenin, sosyal duygusal öęrenmenin varyansı üzerinde %1’lik bir etkiye sahip olduęunu göstermiřtir. Bu, sosyal duygusal öęrenme becerilerinin önemli bir katkı saęladığını ortaya koymuřtur. Moderasyon analizi sonuçları, sosyal duygusal öęrenme becerileri daha yüksek olan ergen bireylerin, düşük olanlara kıyasla benlik farklılařması ve teknoloji baęımlılıęı arasındaki iliřkiyi daha

fazla etkilediğini göstermektedir. Yani daha yüksek sosyal duygusal öğrenme becerilerine sahip bireyler daha az teknoloji bağımlılığı göstermekte ve benlik farklılaşmasının daha fazla olabileceğini bize göstermektedir.

Tartışma ve Sonuç

Araştırma bulgularına göre, ilk olarak ergenlerde benliğin farklılaşması ile teknoloji bağımlılığı arasında negatif bir ilişki olduğu belirlenmiştir. Alan yazın incelendiğinde, bu bulgunun daha önce yapılmış benzer çalışmalar tarafından desteklendiği görülmektedir. Çalışmamızın bir diğer bulgusu ise, ergenlerde benliğin farklılaşması ile sosyal duygusal öğrenme becerilerinin ilişkili olduğudur. Nitekim, literatür, sosyal duygusal öğrenme becerilerini, sosyal yaşamda ergenin duygusal süreçleri doğru yönetmesini ve kurduğu ilişkilerden keyif almasını sağlayan ve yaşam kalitesini yükselten yaşamsal beceriler olarak açıklamaktadır. Bu becerilerin, ergenlerin kendilerini değerli hissetmelerini ve duygularının ve ihtiyaçlarının farkında olmalarını sağlayarak onların olumlu benlik imajı geliştirmelerine yardımcı olacağı ileri sürülmektedir.

Araştırmada ergenlerde benliğin farklılaşması ile teknoloji bağımlılığı arasındaki ilişkiyi sosyal duygusal öğrenme becerilerinin modere ettiği sonucuna ulaşılmıştır. Bireylerin ergenlik dönemindeki sosyal medya kullanım kalıpları ve söz konusu kalıpların sosyal ve duygusal işlevlerini nasıl etkilediği hakkında oldukça az şey bilinmektedir. Ancak teknoloji ve sosyal medya kullanım düzeyinin bireylerin sosyal duygusal öğrenme becerileri ile ilgili olabileceği ileri sürülmektedir. Dolayısıyla, araştırmada ortaya çıkan bulgulara göre, daha yüksek sosyal duygusal öğrenme becerilerine sahip bireyler benlik farklılaşması konusunda pozitif etkilenmekte ve daha az teknoloji bağımlılığı eğilimi göstermektedir. Sosyal duygusal beceriler, bireylerin negatif duygularını ve sosyal kaygılarını azaltmalarına ve internet bağımlılığı gibi olumsuz ve yapıcı olmayan davranışların ortaya çıkmasını engellemeye, sorunları yapıcı/başarılı bir şekilde çözmelerine yardımcı olan bir yapı göstermektedir.

Bu çalışma sonuçlarından hareketle, gelişim açısından kritik bir dönemden geçmekte olan ergen bireylerin sosyal duygusal öğrenme becerilerinin artırılmasının, sağlıklı bir benlik farklılaşması geliştirmeleri ve teknoloji bağımlılığından uzaklaşmaları konusunda önemli katkılar sağlayabileceği söylenebilir. Bu anlamda, günümüzün en önemli sorunlarından biri olan teknoloji bağımlılığını önlemek ya da ortadan kaldırmak için, okullarda çocuk ve ergenlerin sosyal-duygusal öğrenme becerilerini artırmaya yönelik bireysel ya da grupla psikolojik danışma uygulamalarının, yoğun bir gelişim sürecinden geçmekte olan ergen bireylere önemli katkılar sağlayabileceği ifade edilebilir. İlaveeten, aile danışmanlığı uygulamaları ile ergenlik döneminde kimlik ve benlik gelişimini destekleyici ve aileden ayrımlaşmaya ve benliğin farklılaşmasına katkı sağlayacak şekilde önleyici psikolojik danışma çalışmalarının önemli katkılar sağlayabileceği söylenebilir.