

The Roles of Internet Addiction and Cyberbullying Sensitivity for Prediction of University Students' Psychological Inflexibility*

Büşra Kabakcı¹  Zeliha Traş² 

¹Psychological Counselor, Ministry of Education, Muş, Türkiye busrakabakcii@hotmail.com

²Professor Dr., Necmettin Erbakan University, Faculty of Education, Psychological Counseling and Guidance, Konya, Türkiye, ztras@erbakan.edu.tr (Corresponding Author)

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ABSTRACT

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In this research, it is aimed to examine the role of internet addiction and cyberbullying sensitivity on the psychological inflexibility of university students. The study group was formed with university students studying in the state and selected by the random cluster sampling method. The relational screening model was used in the research. 561 university students, including 473 girls and 88 boys, participated in the research. Acceptance and Action Form-2, Young Internet Addiction Short Form, Cyber Bullying Sensitivity Scale, and Personal Information Form were used to collect the data for the research. Independent samples t-test, one-way analysis of variance Pearson Product Moments Correlation Technique, and multiple linear regression analysis were used in the research. As a result, the average psychological inflexibility scores of students with a low perceived family income level were found to be significantly higher than those of students with a moderate perceived family income. It was found that the psychological inflexibility score averages of the group whose purpose of using the Internet is to shop were higher than the psychological inflexibility score averages of the group using the Internet for information purposes. As the daily usage of social media increases, the average psychological inflexibility score increases. There is a significant positive relationship between Internet addiction and psychological inflexibility. There is a significant positive relationship between sensitivity and psychological inflexibility related to cyberbullying. According to the research findings, it has been found that the sensitivity related to internet addiction and cyberbullying is a predictor of psychological inflexibility scores.

Üniversite Öğrencilerinin Psikolojik Esnekliklerinin Yordanmasında İnternet Bağımlılığı ve Siber Zorbalık Duyarlılığının Rolü

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Bu araştırmada üniversite öğrencilerinin psikolojik esneklik, internet bağımlılığı ve siber zorbalığa ilişkin duyarlılık düzeylerinin rolünün incelenmesi amaçlanmaktadır. Çalışma grubu, devlet üniversitesinde öğrenim gören ve tesadüfi küme örnekleme yöntemiyle seçilen üniversite öğrencilerinden oluşturulmuştur. İlişkisel tarama modeli kullanılmıştır. Araştırmaya 473'ü kız, 88'i erkek olmak üzere 561 üniversite öğrencisi katılmıştır. Verilerin toplanmasında Kabul ve Eylem Formu-2, Genç İnternet Bağımlılığı Kısa Formu, Siber Zorbalık Duyarlılık Ölçeği ve Kişisel Bilgi Formu kullanılmıştır. Araştırmada bağımsız örnekler t-testi, tek yönlü varyans analizi, Pearson Momentler Çarpımı Korelasyon Tekniği ve çoklu doğrusal regresyon analizi kullanılmıştır. Bulgulara göre, algılanan aile geliri düzeyi düşük olan öğrencilerin ortalama psikolojik esneklik puanlarının, algılanan aile geliri orta düzeyde olan öğrencilere göre anlamlı düzeyde yüksek olduğu bulunmuştur. İnterneti kullanma amacı alışveriş yapmak olanların psikolojik esneklik puan ortalamalarının, interneti bilgi amaçlı kullanan grubun psikolojik esneklik puan ortalamalarından daha yüksek olduğu tespit edilmiştir. Sosyal medyanın günlük kullanım süresi arttıkça ortalama psikolojik esneklik puanı da artmaktadır. İnternet bağımlılığı ile psikolojik esneklik arasında pozitif yönde anlamlı bir ilişki vardır. Siber zorbalığa ilişkin duyarlılık ile psikolojik esneklik arasında pozitif yönde anlamlı bir ilişki vardır. İnternet bağımlılığı ve siber zorbalığa ilişkin duyarlılığın psikolojik esnekliği yordadığı tespit edilmiştir.

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INTRODUCTION

It is important to be able to maintain psychological health in the face of experiences that cause negative emotions. Experiences such as a serious illness, abuse, or the loss of a relative can be given as examples of these experiences (Doğru, 2019). Being flexible contributes to a person's mental health by supporting the individual's adaptation level (Bond et al., 2006; Çolak, 2014). The concept of psychological flexibility includes six basic dimensions: acceptance, cognitive dissociation, being in the moment, contextual self, values, and value-oriented actions (Hayes et al., 2006). According to Hayes et al. (2006), the experience of life of non-functional efforts instead of attempting to change through to be able to adopt an attitude of accepting life “accept” in size; in order to be more functional thoughts, re-editing “cognitive dissociation” defines the size of. Being able to experience experiences in the present moment without focusing on the future or the past expresses the dimension of “being in the moment” (Twohig, 2012). The ability to maintain self-perception while experiencing experiences meets the dimension of “contextual self” (Grégoire et al., 2018). The “values” dimension means determining the values that will give meaning to a person's life and increasing his awareness about his values (Ercengiz, 2017). When a person can adapt the values, he adopts to his actions and behaviors, he provides “dedicated activism” (Sewart et al., 2019).

The inability to achieve psychological flexibility causes psychological inflexibility (Kashdan and Rottenberg, 2010). The inability to change one's behavior functionally in line with the changes that occur in one's life is defined as psychological inflexibility (Gilbert et al., 2018). Due to an inability to achieve psychological flexibility, the process of hardening from a psychological point of view leads to a worsening of the situation encountered (Levin et al., 2014). Achieving psychological flexibility involves adapting to fluctuating situations and being determined to stay adapted (Kashdan & Rottenberg, 2010). In the literature, instead of focusing on changing psychological events, acceptance and commitment therapy emerges as a theory that deals with the psychological reactions, acceptance, and determination of the person to these situations. Acceptance and Commitment Therapy is a cognitive behavior therapy approach that focuses on the process of increasing psychological flexibility (Levin et al., 2013). According to Acceptance and Commitment Therapy, the six interrelated dimensions that cause psychological inflexibility are shown as follows:

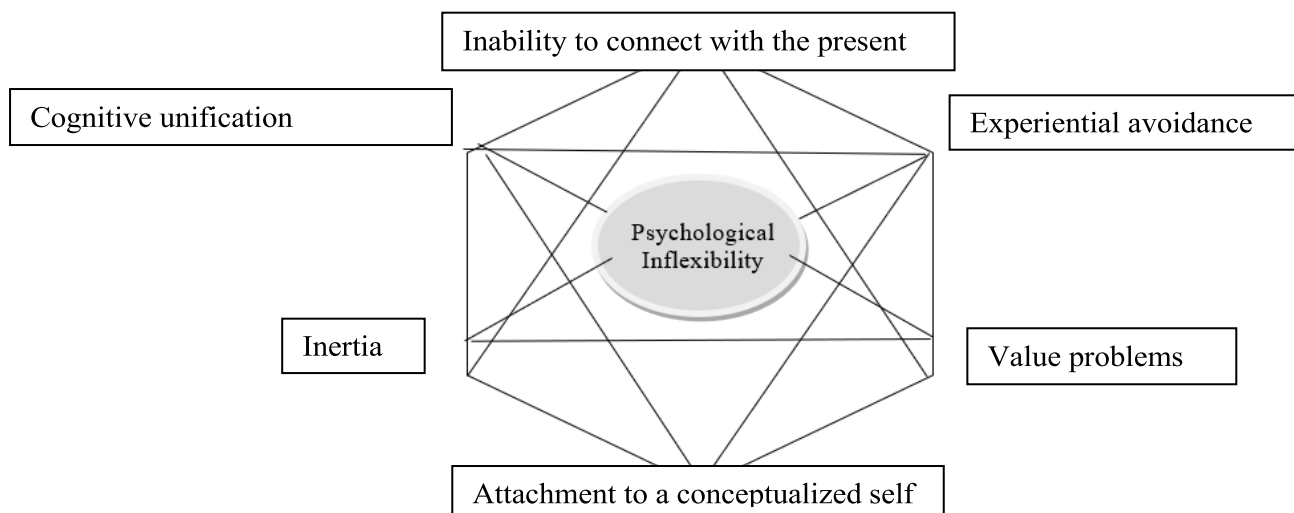


Figure 1. Psychological Inflexibility Model (Hayes et al., 2006).

Individuals can apply for the option of spending time on the Internet in order to cope with difficult situations they face, such as problems with the development of a sense of identity and meaningful, intimate relationships (Kandell, 1998). With the increase in access to the Internet

(Turkish Statistical Institute [TUIK], 2019), there is also an increase in the risks hosted by online platforms (Kaşıkçı et al., 2014), and internet addiction is considered one of these risks (Block, 2008; Guan and Subrahmanyam, 2009). Internet addiction is defined as the fact that a person's internet use habits and patterns are so problematic that they negatively affect a person's functionality in life (Beard and Wolf, 2001). Negative functionality in a person's life can sometimes be interpreted as a triggering reason for internet addiction. Online environments are attractive to users who have less control over their real-life functions because they provide a person with opportunities such as the ability to edit information, give commands, or avoid them (Kandell, 1998).

One of the risks that increases with Internet use is cyberbullying (Smith et al., 2008). All ongoing, harmful, and intentional negative attitudes and behaviors by groups or individuals are called bullying (Olweus, 1994). Cyberbullying is considered the continuation of traditional bullying behaviors in virtual environments (Campbell, 2005). The possibility of remaining anonymous in a virtual environment has an encouraging effect on bullies (Mishna et al., 2009). It is known that cyberbullying has the effects of increasing the likelihood of emotional problems in cybervictims, having difficulty establishing bilateral relationships, and feeling pushed into loneliness (Dinç, 2020).

METHOD

Research Design

In this study, a correlational research model was used to investigate the relationship between psychological inflexibility, internet addiction levels, and cyberbullying sensitivity levels of university students. Correlational research is used to investigate the relationships between variables (Shaughnessy, Zechmeister, and Zechmeister, 2012). The dependent variable of this research is psychological inflexibility, and the independent variables are sensitivity to Internet addiction and cyberbullying sensitivity.

Research Sample

A total of 427 teacher candidates, 318 of whom are women (74.5%) and 109 of whom are men (25.5%), studying at a university in the Central Anatolia Region, constitute the working group of this research. The age ranges of the participants are from 18 to 27, and the average age was 22.

Research Instruments and Processes

The working group for the research consists of 561 university students, 473 of whom are women and 88 of whom are men, who are studying in various departments at the state university in the Central Anatolia Region in 2020–2021. As data collection tools, Acceptance and Action Form-2, Young's Internet Addiction Test-Short Form (YIAT-SF), the Sensitivity Scale Related to Cyberbullying, and the Personal Information Form were used.

Acceptance and Action Form-2: Acceptance and Action Form-2, developed by Bond et al. (2011), has been adapted to Turkish culture by Yavuz et al. (2016). The Turkish form is in 7-point Likert type, as in the original (1: It is never correct. 7: Always true), which consists of 7 items. Although there is no reverse clause in the form, high scores indicate a high level of psychological inflexibility. In the adaptation study, the Cronbach alpha coefficient of the form was found to be 0.84. As a result of the values obtained, the form is accepted as a reliable measurement tool. For this research, the Cronbach Alpha coefficient number was found to be 0.87.

Young's Internet Addiction Test-short Form (YIAT-SF): Test, which was developed by Young (1998) and converted to YIAT-SF by Pawlikowski, Altstotter-Gleich, and Brand (2013). It's five-likert-type (1=never, 5=very often) and consists of 12 items. YIBT-SF has been adapted into Turkish by Kutlu, Savcı, Demir and Aysan (2016). The scale does not contain inverse matter. It is accepted that the level of Internet addiction increases as the total score increases. In the adaptation study, the Cronbach alpha coefficient was found to be 0.91 in university students and 0.86 in adolescents. According to the obtained values, it is possible to say that the scale is a reliable measurement tool. For this research, the Cronbach Alpha coefficient number was found to be 0.85.

The Sensitivity Scale Related to Cyberbullying: The Sensitivity Scale Related to Cyberbullying was developed by Tanrikulu et al. (2013). It is a single-factor, triple-likert (1=no, 2=sometimes, 3=yes) type scale consisting of 13 items and does not contain any items that are scored inversely. The lowest score that can be taken from the scale is 13, and the highest score is 39. The height of the score obtained from the scale indicates a high level of sensitivity to cyberbullying. The number of internal consistency coefficients in the first psychometric findings of the scale was 83. For this research, the Cronbach Alpha coefficient number was found to be 0.80. According to the obtained values, it is possible to say that the scale is a reliable measurement tool.

Personal Information Form: The Personal Information Form created by the researcher has been created in order to collect general information from the individuals who will participate in the research. Personal information form: the gender of the participants, the state of having a romantic relationship, the perceived level of family income, perceived by mom and dad upbringing stance, daily internet usage time on weekdays and weekends, daily internet usage time, the purpose of internet use, social media use social media daily to determine the duration of the purpose of usage and consists of questions.

Implementation Process

For the scales used in the study, necessary permissions were obtained from the researchers who adapted or developed them. The measurement tools were delivered online to the volunteer participants, and the data were collected during a 1-week period in the 2020–2021 academic year. The Google Forms link containing the measurement tools was shared with the volunteer participants, and it was ensured that every question was answered in order to be taken into statistical evaluation.

Data Analysis

The SPSS 20.00 software was used in the statistical analysis of the data. The scales were initially administered to 577 participants. The “Mahalobis” distance value was calculated to obtain and remove extreme values. Following data loss, data from 561 participants was included in the analysis. After removing extreme values, skewness and kurtosis coefficients and their average values were examined in order to investigate the normal distribution feature of the scores obtained from the variables. Frequency, reliability, and multiple linear regression analyses were performed to analyze the data obtained. During the statistical analysis process, a normality test was performed to understand whether the data sets showed a homogeneous distribution. In order to compare the quantitative differences in data between two groups in tests showing homogeneous distribution, an independent samples t test was used from parametric tests, and a one-way analysis of variance (ANOVA) was used to compare the differences between more than two groups for the evaluation of quantitative data. Within the scope of variance analysis procedures, Tukey's multiple comparison test was used to understand which groups had differences between the groups. In order to perform correlational operations in the study, the Pearson Product Moment Correlation Coefficient was included in the analysis. Multiple linear

regression analysis was used to examine the linear correlation between the independent variables and the dependent variable.

Ethic

This study was prepared from a master's thesis. With its evaluation dated 18.12.2020, Necmettin Erbakan University Social and Human Sciences Scientific Research Ethics Committee decided that there are no ethical concerns or issues associated with conducting the research with the decision number 2020/116. (18/12/2020, 2020/116).

RESULTS

Table 1. *Correlation coefficients, means and standard deviations of the study variables*

Variables	N	Mean	SD
Psychological Inflexibility	561	25.82	10.151
Internet Addiction	561	27.68	8.332
Cyberbullying Sensitivity	561	32.54	4.797

While psychological inflexibility scores are spread further from the mean, sensitivity scores for internet addiction and cyberbullying are spread closer to the mean according to standard deviation value.

Table 2. *T Test Results of Psychological Inflexibility Scores of University Students According to Gender Variable*

Variables	Gender	N	Mean	SD	t	p
Psychological Inflexibility	Female	473	26.11	559	1.576	.116
	Male	88	24.26	88		

*** $p < .05$

Looking at the Table 2 as a result of the comparisons made, it was observed that there was no significant difference between the psychological inflexibility score averages of university students according to the gender variable. ($p=.116$, $p<.05$)

Table 3. *T Test Results of University Students' Psychological Inflexibility Scores According to the Romantic Relationship Variable*

Variables	Relationship	Mean	SD	t	p
Psychological Inflexibility	Present	26.91	559	1.606	.109
	Absent	24.39			

*** $p < .05$

Looking at Table 3, there was no significant difference between the psychological inflexibility score averages of university students according to the variable of having a romantic relationship. ($p=.109$, $p<.05$)

Table 4. *The Data of the Psychological Inflexibility Score Averages of University Students According to the Perceived Family Income Level*

Variables	Family Income	N	Mean	SD
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The Roles of Internet Addiction and Cyberbullying Sensitivity for Prediction of University Students' Psychological Inflexibility

	Level			
Psychological Inflexibility	Low	89	29.32	9.81
	Medium	432	25.14	10.00
	High	40	25.42	11.09

In Table 4, it can be seen that the highest score perception regarding the psychological inflexibility mean scores of those held at universities is stated by those with low family income levels ($\bar{x} = 29.32$). Respectively, those with high income ($\bar{x} = 25.42$) and those with medium income ($\bar{x} = 25.14$).

Table 5. *The Results of One-Way Variance Analysis of Psychological Inflexibility Score Averages of University Students According to Perceived Family Income Level*

Varieables		SS	SD	MS	F	p	Relation
Psychological Inflexibility Scale Mean Scores	Between Groups	1299.168	2	649.584	6.425	.002***	1-2
	Within Groups	56415.712	558	101.103			
	Total	57714.881	560				

*** $p < .05$ (1: Low family income, 2: Medium family income)

Examining Table 5, it was found that the psychological inflexibility score averages of university students differed significantly according to the perceived family income level variable. ($p=.002$, $p<.05$) By looking at the Tukey test, it was found that this differentiation was between students with a low perceived family income level and students with a medium perceived family income.

Table 6. *The Data of the Psychological Inflexibility Score Averages of University Students According to the Internet Usage Time on Weekdays*

Varieables	Internet Usage on Weekday	N	Mean	SD
Psychological Inflexibility	0-2 hours	108	23.50	10.81
	3-4 hours	189	25.84	9.91
	5-6 hours	133	25.89	9.75
	6 hours and more	131	27.64	10.05

Examining Table 6, it is found that the psychological inflexibility mean scores of university students differ significantly according to the variable of internet usage time on weekdays. ($p=.019$, $p<.05$) Looking at the Tukey test, it is seen that this difference is between students whose internet usage time is 0-2 hours on weekdays and those whose internet usage time is 6 hours or more.

Table 7. *The Results of the One-Way Variance Analysis of the Psychological Inflexibility Score Averages of University Students According to the Duration of Internet Usage Time on Weekdays*

Varieables		SS	SD	MS	F	p	Relation
Psychological Inflexibility Scale Mean Scores	Between Groups	1020.269	3	340.090	3.341	0.19***	1-4*
	Within Groups	56694.612	557	101.786			
	Toplam	57714.881	560				

*** $p < .05$ (1: 0-2 hours, 4: 6 hours and more)

Examining Table 7, it was found that the psychological inflexibility score averages of university students differed significantly according to the internet usage time variable on weekdays.

($p=.019$, $p<.05$) By looking at the Tukey test, it is seen that this differentiation is among students whose internet usage time is 0-2 hours on weekdays and 6 hours and more.

Table 8. *The Data of the Psychological Inflexibility Score Averages of University Students According to the Internet Usage Time on Weekends*

Variables	Internet Usage on Weekend	N	Mean	SD
Psychological Inflexibility	0-2 hours	75	23.50	9.55
	3-4 hours	158	24.43	10.33
	5-6 hours	147	26.13	9.96
	6 hours and more	181	27.75	10.08

Examining Table 8, when looking at the psychological inflexibility mean scores of university students, it is seen that the students who use the internet for 6 hours or more on the weekends get the highest score ($\bar{x} = 27.75$). Then respectively, It is seen that students whose internet usage time is 5-6 hours ($\bar{x} = 26.13$), 3-4 hours ($\bar{x} = 24.43$) and 0-2 hours ($\bar{x} = 23.50$) on the weekend.

Table 9. *The Results of the One-Way Variance Analysis of the Psychological Inflexibility Score Averages of University Students According to the Internet Usage Time on the Weekend*

Variables		SS	SD	MS	F	p	Relation
Psychological Inflexibility Scale Mean Scores	Between Groups	1396.309	3	465.436	4.603	.003***	1-4* 2-4*
	Within Groups	56318.572	557	101.111			
	Total	57714.881	560				

*** $p < .05$ (1: 0-2 hours, 2: 3-4 hours and 4: 6 hours and more)

It has been found that the psychological inflexibility score averages of university students differ significantly according to the weekend internet usage time variable. ($p=.003$, $p<.05$) This differentiation was examined by looking at the Tukey test. It is observed that there is a significant relation between students with 0-2 hours of internet use on the weekend and 6 hours and more, and between students who use the Internet for 3-4 hours and 6 hours and more on the weekend.

Table 10. *The Results of the One-Way Variance Analysis of the Psychological Inflexibility Score Averages of University*

Variables		SS	SD	MS	F	p	Relation
Psychological Inflexibility Scale Mean Scores	Between Groups	1414.046	2	707.023	7.007	.001***	1-2* 2-3*
	Within Groups	56300.834	558	100.898			
	Total	57714.881	560				

*** $p < .05$ (1: Shopping 2: For information purposes 3: Hobbies)

Table 10 shows the results of the one-way analysis of variance test of the psychological inflexibility score averages of university students according to the internet use purpose variable. In the analysis results, it is seen that the psychological inflexibility scores of university students differ significantly according to the purpose of internet use ($p=.003$, $p<.05$). This difference is in favor of the group using it for shopping purposes and between the group using it for information acquisition and in favor of the group using it for hobby purposes. The average psychological inflexibility scores of the

group using the Internet for shopping purposes and the group using it for hobby purposes are significantly higher.

Table 11. *The Results of the One-Way Variance Analysis of the Psychological Inflexibility Score Averages of University Students According to the Duration of Daily Use of Social Media*

Variables		SS	SD	MS	F	p
	Between Groups	1043.614	3	347.871	3.419	.017***
Psychological Inflexibility Scale Mean Scores	Within Groups	56671.266	557	101.744		
	Total	57714.881	560			

*** $p < .05$

In Table 11 the results of one-way variance analysis of the psychological inflexibility score averages of university students according to the social media daily usage time variable are given. In the analysis results, it is seen that the psychological inflexibility scores of university students differ significantly according to the duration of daily use of social media. ($p=.017$, $p<.05$) This difference is between university students with a daily social media usage time of 5-6 hours and students who do not use social media. It has been found that the psychological inflexibility scores of university students with a daily social media usage time of 5-6 hours are significantly higher.

Table 12. *The Correlational Results of the Relationship Between Psychological Inflexibility, Internet Addiction and Cyberbullying Sensitivity Levels of University Students*

Variables	Psychological Inflexibility	Internet Addiction	Cyberbullying Sensitivity
Psychological Inflexibility	1		
Internet Addiction	.410**	1	
Cyberbullying Sensitivity	.088*	-.065	1

** $p<.01$, * $p<.05$

Examining Table 12, a significant and positive relationship was found between the psychological inflexibility score averages of university students and the internet addiction score averages ($r=.41$, $p<.01$). A positive significant relationship was found between the psychological inflexibility score averages of university students and the sensitivity score averages related to cyberbullying ($r=.08$, $p<.05$). There was no statistically significant relationship between the average internet addiction score of university students and the average sensitivity score related to cyberbullying ($r=-.06$, $p>.05$).

Table 13. *The Results of the Regression Analysis regarding the Psychological Inflexibility Score Averages*

Variables	B	Standart Error	β	t
1.Constant	3.872	3.044		1.272
2.Internet Addiction	.508	.047	.417	10.858
3.Cyberbullying Sensitivity	.243	.081	.115	2.985

Examining Table 13, it is seen that internet addiction and its sensitivity to cyberbullying give a statistically significant relationship with psychological inflexibility as a result of multiple linear regression analysis ($R=.42$, $R^2=.18$, $p<.01$). Accordingly, the predictive variables together explain 18% of the variance in psychological inflexibility. When the standardized (β) coefficient and t values are

examined, it can be said that Internet addiction and sensitivity to cyberbullying, respectively, are a significant predictor of psychological inflexibility as a level of relative importance.

DISCUSSION

This research aims to examine the role of internet addiction and cyberbullying sensitivity on the psychological inflexibility of university students. In this study, no statistically significant difference was found between the psychological inflexibility levels of university students and the gender variable. Research supporting this finding is found in the literature of the field (Dağgeçen-Başsu, 2016; Hayes et al., 2004; Toprak et al., 2020). In addition to the studies showing that there is no significant relationship, there are also studies that have found that psychological inflexibility differs significantly in favor of women according to gender (Masuda et al., 2014; Masuda et al., 2015; Stapleton et al., 2020).

One of the findings of this research is that the psychological inflexibility score averages of university students differ significantly according to the perceived family income level between the group with a low perceived family income level and the group with a high perceived family income level. Children who are exposed to a poor family environment and poor financial opportunities from early childhood experience a delay in cognitive flexibility compared to their peers (Clearfield and Niman, 2012). Since it is known that the characteristics of the developmental period and the environmental effect are effective in the formation of psychological inflexibility and experiential avoidance (Chou et al., 2018), it can be considered that the psychological inflexibility levels of university students begin to take shape at a young age depending on the perceived family income level or that the basis of their inflexibility levels depends on the conditions in childhood.

It was found that the average psychological inflexibility score of university students significantly differed between the group using 0–2 hours daily and the group using 6 hours and more, in favor of the group using for longer periods of time according to the duration of internet use on weekdays and the duration of internet use on weekends. Looking at the literature, increasing the amount of time spent on the Internet poses a risk for Internet addiction (Tonioni et al., 2012), and it is found that psychological inflexibility increases as the severity of Internet addiction increases (Chou et al., 2017; Dong et al., 2014). There are also studies suggesting that increasing psychological inflexibility triggers Internet addiction (Chou et al., 2018). The fact that Internet addiction is an addiction that triggers social apathy (Prosecutor and Aysan, 2017), negatively affects a person's sharing of his inner world (Arslan and Kiper, 2018), and prevents him from meeting new people (Anderson, 2001) is one of the dimensions of psychological inflexibility and experiential avoidance (Hayes et al., 2006). It is thought that it may cause inflexibility by negatively affecting its size.

It has been found that the psychological inflexibility scores of university students who use the Internet for shopping purposes are significantly higher than those of other students. Unlike this study of college students, according to the purpose of internet use, internet addiction in a study that examines the levels of internet, “leisure” and “social relationships” use for purposes students who were found to have higher internet addiction scores (Aksoy and Ünübol, 2021; Ceyhan, 2011).

The psychological inflexibility scores of college students who spent 7 hours and more per day on social media are statistically significantly higher than those of those groups who spent 1-2 hours, 3-4 hours, 5-6 hours per day, and the group who don't use social media. One of the biggest motivating reasons for using social media is disconnection from real life and avoidance of experiences (Coyne et al., 2013). Considering the possibility of “avoiding the lives” that social media provides to people, the idea that people have lost their psychological flexibility comes to mind.

In this study, it was found that cyberbullying predicts psychological inflexibility. When the literature is examined, various studies in which cyberbullying and psychological inflexibility variables are considered together show that psychological inflexibility has an effect on cyberbullying (Kinnari and Tysk, 2020; Yalınz, 2019). Accordingly, it has been thought that there may be a mutual effect between cyberbullying and psychological inflexibility.

According to this research, along with the sensitivity variables related to internet addiction and cyberbullying, the psychological inflexibility scores of university students have a significant relationship. It can be interpreted that feeling rejected by being bullied and being dependent on an online environment where one has excessive control due to internet addiction makes psychological flexibility, which includes the acceptance of unexpected life events, difficult. 18% of the total variance in psychological inflexibility is predicted by predictive variables.

Studies have shown that Internet addiction causes a decrease in flexibility (Dong et al., 2014). People with Internet addiction are more prone to maintaining a certain behavior than reacting to a behavior change when faced with an incompatible situation compared to healthy individuals (Dong et al., 2014). It can be said that their cognitive inflexibility also affects their actions, causing a decrease in psychological flexibility in behavior and thought. According to a study, young adults with Internet addiction are more inclined to avoid and remain inactive than to use strategies to cope with situations such as stress (Cheng et al., 2015). Similarly, it is known that other addictions have a negative effect on cognitive flexibility (Odlaug et al., 2011).

Considering the fact that students with low family income levels have higher psychological inflexibility, it is clear that factors such as financial security and opportunities may have an impact on people's psychological rigidity levels. In this regard, psychoeducation programs can be organized to reduce and control psychological rigidity, especially for people who have just started university. It is thought that content that emphasizes alternative ways to support psychological flexibility and methods of coping with the conditions they are in may be beneficial for people who tend to lose psychological flexibility due to financial means and financial concerns. As an alternative to the time spent on the Internet, it is thought that it will be useful to support young people in their hobbies and activities that will support their face-to-face social relationships.

Defining and investigating the dimensions and situations that cause psychological rigidity to increase as family income levels decrease will contribute to the literature. Whether this situation is due to a lack of financial means or a result of this lack is one of the issues that need to be investigated.

It may be useful to conduct further studies on the current time management skills of first-year university students, whose psychological flexibility decreases as their internet use increases during weekdays and weekends, their increased internet usage time, and their tendency to turn to online environments. It is thought that researching the process of adaptation to university life, which is a new social environment they are involved in, together with variables such as social relationship skills, self-confidence, and social appearance anxiety, may shed light on the underlying reasons for the increase in internet use.

REFERENCES

- Aksoy F. & Ünübol H. (2021). The Relationship between Internet Addiction and Schema Mechanisms in Adolescents. *Addiction Journal*, 22(2), 103-113.
- Anderson, K. J. (2001). Internet use among college students: an exploratory study. *Journal of American College Health*, 50(1), 21–26. doi:10.1080/07448480109595707
- Arslan, N. & Kiper, A. (2018). Self-disclosure and internet addiction. *Malaysian Online Journal of Educational Technology*, 6(1), 56-63.
- Beard, K. W. & Wolf, E. M. (2001). Modification in the proposed diagnostic criteria for internet addiction. *CyberPsychology & Behavior*, 4(3), 377–383. <https://doi.org/10.1089/109493101300210286>

- Block, J. J. (2008). Issues for DSM-V: internet addiction. *American Journal of Psychiatry*, 165, 306–307. doi: 10.1176/appi.ajp.2007.07101556
- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., ... Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionnaire–II: A revised measure of psychological inflexibility and experiential avoidance. *Behavior Therapy*, 42, 676–688. <https://doi.org/10.1016/j.beth.2011.03.007>.
- Bond, F.W., Hayes, S.C. & Barnes-Holmes, D. (2006) Psychological flexibility, ACT, and organizational behavior. *Journal of Organizational Behavior Management*, 26:1-2, 25-54. http://dx.doi.org/10.1300/J075v26n01_02
- Campbell, M. A. (2005). Cyber bullying: An old problem in a new guise?. *Australian Journal of Guidance and Counselling*, 15(1). 68-76. <https://doi.org/10.1375/ajgc.15.1.68>
- Ceyhan, A.A. (2011). University students' problematic internet use and communication skills according to the internet use purposes. *Educational Sciences: Theory and Practice*, 11(1), 69-77. URL: <https://files.eric.ed.gov/fulltext/EJ919890.pdf>
- Cheng, C., Sun, P. & Mak, K.-K. (2015). Internet addiction and psychosocial maladjustment: avoidant coping and coping inflexibility as psychological mechanisms. *Cyberpsychology, Behavior, and Social Networking*, 18(9), 539–546. <https://doi.org/10.1089/cyber.2015.0121>
- Chou, W.-P., Lee, K.-H., Ko, C.-H., Liu, T.-L., Hsiao, R. C., Lin, H.-F. & Yen, C.-F. (2017). Relationship between psychological inflexibility and experiential avoidance and internet addiction: Mediating effects of mental health problems. *Psychiatry Research*, 257, 40–44. <https://doi.org/10.1016/j.psychres.2017.07.021>
- Chou, W.-P., Yen, C.-F. & Liu, T.-L. (2018). Predicting effects of psychological inflexibility/experiential avoidance and stress coping strategies for internet addiction, significant depression, and suicidality in college students: A prospective study. *International Journal of Environmental Research and Public Health*, 15(4), 788. <https://doi.org/10.3390/ijerph15040788>
- Clearfield, M. W. & Niman, L. C. (2012). SES affects infant cognitive flexibility. *Infant Behavior and Development*, 35(1), 29–35. <https://doi.org/10.1016/j.infbeh.2011.09.007>
- Coyne, S. M., Padilla-Walker, L. M. & Howard, E. (2013). Emerging in a Digital World. *Emerging Adulthood*, 1(2), 125–137. <https://doi.org/10.1177/2167696813479782>
- Çolak, T.S. (2014). *The Effectiveness of Logotherapy-Oriented Group Counseling in Fostering Forgiveness Flexibility*. (Unpublished doctoral dissertation). Sakarya University Institute of Educational Sciences, Sakarya.
- Dinç, E.S. (2020). Cyberbullying on Social Media Platforms: Examining High School Students' Experiences of Cyberbullying. *New Media Electronic Journal*, 4(1), 24-39. <https://doi.org/10.17932/IAU.EJNM.25480200.2020.4/1.24-39>
- Doğru, G. (2019). *The Predictive Effect of Post-Traumatic Cognitions, Trauma-Related Guilt, and Locus of Control on Obsessive-Compulsive Disorder Symptoms in Individuals with Trauma Experience*. (Unpublished master's thesis). Hacettepe University Institute of Social Sciences, Ankara.
- Dong, G., Lin, X., Zhou, H. & Lu, Q. (2014). Cognitive flexibility in internet addicts: fMRI evidence from difficult-to-easy and easy-to-difficult switching situations. *Addictive Behaviors*, 39(3), 677–683. <https://doi.org/10.1016/j.addbeh.2013.11.028>
- Ercengiz, M. (2017). *The Effect of Acceptance and Commitment Therapy-Oriented Psycho-Educational Program on Decision-Making Styles*. (Unpublished doctoral dissertation). Sakarya University Institute of Educational Science, Sakarya.
- Gilbert, K. E., Tonge, N. A. & Thompson, R. J. (2018). Associations between depression, anxious arousal and manifestations of psychological inflexibility. *Journal of Behavior Therapy and Experimental Psychiatry*. <https://doi.org/10.1016/j.jbtep.2018.09.006>
- Grégoire, S., Lachance, L., Bouffard, T. & Dionne, F. (2018). The use of acceptance and commitment therapy to promote mental health and school engagement in university students: a multisite randomized controlled trial. *Behavior Therapy*, 49(3), 360–372. <https://doi.org/10.1016/j.beth.2017.10.003>

- Guan, S.-S. A. & Subrahmanyam, K. (2009). Youth Internet use: risks and opportunities. *Current Opinion in Psychiatry*, 22(4), 351–356. <https://doi.org/10.1097/ycp.0b013e32832bd7e0>
- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A. & Lillis, J. (2006). Acceptance and Commitment Therapy: Model, processes and outcomes. *Behaviour Research and Therapy*, 44(1), 1–25. <https://doi.org/10.1016/j.brat.2005.06.006>
- Kandell, J. J. (1998). Internet Addiction on Campus: The Vulnerability of College Students. *CyberPsychology & Behavior*, 1(1), 11–17. <https://doi.org/10.1089/cpb.1998.1.11>
- Kashdan, T. B. & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, 30(7), 865–878. <https://doi.org/10.1016/j.cpr.2010.03.001>
- Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review*, 30(7), 865–878. <https://doi.org/10.1016/j.cpr.2010.03.001>
- Kaşıkcı, D. N., Çağıltay, K., Karakuş, T., Kurşun, E. & Ogan, C. (2014). Internet Habits and Safe Internet Usage of Children in Türkiye and Europe. *Education and Science*, 39 (171).
- Kinnari, J. & Tysk, L. (2020). The moderating role of psychological flexibility on the relationship between cyber victimization and anxiety in Swedish youth. (Unpublished master's thesis).
- Levin, M. E., MacLane, C., Daflos, S., Seeley, J. R., Hayes, S. C., Biglan, A. & Pistorello, J. (2014). Examining psychological inflexibility as a transdiagnostic process across psychological disorders. *Journal of Contextual Behavioral Science*, 3(3), 155–163. <https://doi.org/10.1016/j.jcbs.2014.06.003>
- Levin, M. E., Pistorello, J., Seeley, J. R. & Hayes, S. C. (2013). Feasibility of a prototype web-based acceptance and commitment therapy prevention program for college students. *Journal of American College Health*, 62(1), 20–30. <https://doi.org/10.1080/07448481.2013.843533>
- Masuda, A., Muto, T., Tully, E. C., Morgan, J. & Hill, M. L. (2014). Comparing Japanese college students' and U.S. college students' disordered eating, distress, and psychological inflexibility. *Journal of Cross-Cultural Psychology*, 45(7), 1162–1174. <https://doi.org/10.1177/0022022114534982>
- Masuda, A., Tully, E. C., Drake, C. E., Tarantino, N., Ames, A. M. & Larson, D. G. (2015). Examining Self-Concealment within the Framework of Psychological Inflexibility and Mindfulness: A Preliminary Cross-Sectional Investigation. *Current Psychology*, 36(1), 184–191. <https://doi.org/10.1007/s12144-015-9399-6>
- Mishna, F., Saini, M. & Solomon, S. (2009). Ongoing and online: Children and youth's perceptions of cyber bullying. *Children and Youth Services Review*, 31(12), 1222–1228. <https://doi.org/10.1016/j.childyouth.2009.05.004>
- Odlaug, B. L., Chamberlain, S. R., Kim, S. W., Schreiber, L. R. N. & Grant, J. E. (2011). A neurocognitive comparison of cognitive flexibility and response inhibition in gamblers with varying degrees of clinical severity. *Psychological Medicine*, 41(10), 2111–2119. <https://doi.org/10.1017/s0033291711000316>
- Olweus D. (1994) Bullying at School. Huesmann L.R. (Ed.) *Aggressive Behavior. The Plenum Series in Social/Clinical Psychology*. Springer, Boston, MA. https://doi.org/10.1007/978-1-4757-9116-7_5
- Pawlikowski, M., Altstötter-Gleich, C. & Brand, M. (2013). Validation and psychometric properties of a short version of Young's Internet Addiction Test. *Computers in Human Behavior*, 29(3), 1212–1223.
- Savcı, M. & Aysan, F. (2017). Technological Dependencies and Social Connectedness: The Predictive Effect of Internet Addiction, Social Media Addiction, Digital Game Addiction, and Smartphone Addiction on Social Connectedness. *Dusunen Adam The Journal of Psychiatry and Neurological Sciences*, 30(3). 202–216. <https://doi.org/10.5350/DAJPN2017300304>
- Shaughnessy, J.J., Zechmeister E.B. & Zechmeister, J.S. (2012). *Research Methods in Psychology*. McGraw Hill.
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry*, 49(4), 376–385. <https://doi.org/10.1111/j.1469-7610.2007.01846.x>
- Stapleton, A., Ruiz, F. J. & McHugh, L. (2020). Comparative investigation of adolescents' generalized pliance and psychological inflexibility across cultural contexts. *The Psychological Record*. <https://doi.org/10.1007/s40732-020-00412-3>

- Tanrıkulu, T., Kınay, H. & Arıçak, O.T. (2013). Sensitivity Scale for Cyberbullying: A Study of Validity and Reliability. *Trakya University Faculty of Education Journal*, 3(1), 38-47.
- Tonioni, F., D'Alessandris, L., Lai, C., Martinelli, D., Corvino, S., Vasale, M., ... Bria, P. (2012). Internet addiction: hours spent online, behaviors and psychological symptoms. *General Hospital Psychiatry*, 34(1), 80–87. <https://doi.org/10.1016/j.genhosppsy.2011.09.013>
- Türkiye İstatistik Kurumu (TÜİK), [Turkish Statistical Institute] (2019). Household Use of Information Technologies Survey. URL: <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=30574>
- Twohig, M. P. (2012). Acceptance and Commitment Therapy. *Cognitive and Behavioral Practice*, 19(4), 499–507. <https://doi.org/10.1016/j.cbpra.2012.04.003>
- Yalnız, A. (2019). *The impact of Acceptance and Commitment Therapy-oriented psychoeducation program on peer bullying*. (Unpublished master's thesis). Sakarya University.
- Yavuz, F., Ulusoy, S., Iskin, M., Esen, F. B., Burhan, H. S., Karadere, M. E. & Yavuz, N. (2016). Turkish version of acceptance and action questionnaire-II (AAQ-II): A reliability and validity analysis in clinical and non-clinical samples. *Bulletin of Clinical Psychopharmacology*, 26(4), 397–408. <https://doi.org/10.5455/bcp.20160223124107>
- Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *CyberPsychology & Behavior*, 1(3), 237–244. <https://doi.org/10.1089/cpb.1998.1.237>