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Genel Merkez / Central Office

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RESEARCH

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ARAŞTIRMA

Açık Erişim

Adaptation of Secondary Traumatic Stress Scale to Turkish for Social Media Users: Reliability and Validity Study

Sosyal Medya Kullanıcıları İçin İkincil Travmatik Stres Ölçeği'nin Türkçe'ye Uyarlanması: Güvenirlilik ve Geçerlik Çalışması

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ABSTRACT

When the literature is analysed, the gap in the researches related to STS for social media users is big. This study aims to adapt the Secondary Traumatic Stress Scale (STSS-SM) for Social Media Users to Turkish, which will contribute to filling the gap in social media users. In the study, data of 708 participants aged 18-26 were analysed. Validity and reliability study of STSS-SM was carried out and its three-factor structure was examined. According to the findings in adaptation to Turkish, STSS-SM consists of a single-factor structure rather than a three-factor structure as in the original. EFA results indicate that scale items can be collected under this single-factor structure. In conclusion, based on validity and reliability studies, it can be said that the Turkish version of STSS-SM is applicable in scientific studies.

Article Information

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ÖZET

Literatür incelendiğinde sosyal medya kullanıcı için İTS ile ilgili araştırmalarında büyük boşluk görülmektedir. Bu çalışma, sosyal medya kullanıcıları İTS araştırmalarında boşluğu doldurmaya katkı sağlayacak Sosyal Medya Kullanıcıları İçin İkincil Travmatik Stres Ölçeğinin (SM-İTSÖ) Türkçe'ye uyarlanmasını amaçlamaktadır. Çalışmada 18-26 yaş arası 708 katılımcının verileri analiz edilmiştir. SM-İTSÖ'nin geçerlilik ve güvenirlik çalışması gerçekleştirilmiş olup üç faktörlü yapısı incelenmiştir. SM-İTSÖ Türkçe uyarlama bulgularına göre orijinalinde olduğu gibi üç faktörlü bir yapı yerine tek faktörlü bir yapıdan oluşmaktadır. AFA sonuçları, ölçek maddelerinin tek faktörlü bu yapı altında toplanabileceğine işaret etmektedir. Geçerlik ve güvenirlik çalışmaları sonuçlarına göre SM-İTSÖ'nün Türkçe versiyonunun bilimsel çalışmalarda uygulanabilir olduğu ifade edilebilir.

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Ethical Statement: The study was carried out within the framework of the Helsinki Declaration and all participants whose informed consents were obtained took part in this study as volunteers. The ethics committee of Ondokuz Mayıs University was consulted for ethical approval of this study.

INTRODUCTION

In recent years, the rapid advancement of internet use due to the development of technology has increased the number of social media users. The comprehensive data of the Global Web Index, published every year, tells us that there were 4.54 billion internet users around the world in January 2020. Considering the data on the same date, it is seen that there are 3.8 billion social media users around the world (Kemp, 2020). This may be an indication that social media use has begun to gain a place as steadfast as the need for the internet, which is an indispensable part of life. The data, with the number of social media users that constitute 81% of the country's population, aged 13 and over, indicates that Turkey also shows similar results.

Young adult social media users all over the world as well as in Turkey have an important place. It can be said that this is due to the high number of young adult users and their usage times (Kemp, 2020). According to TUIK (2019) data, 37.8% of social media users are at the high school level and 49.7% are at the university level. Taken from this angle, almost every levels expressing young adult individuals in Turkey show intensive use of social media. This situation highlights the young adulthood period.

Young adulthood emerges as a very challenging and confusing period developmentally. Young adults are attempting to stabilize harmony with their coevals while at the same time finding their independence. Loneliness, which brings along anger, sadness, alienation from individuals and emptiness, can also be seen in adolescents and young adulthood (Russell, Peplau & Cutrona, 1980). In fact, it is stated in the studies conducted that this condition is more common in adolescents and young adults rather than individuals in older ages (Jones & Carver, 1991). In another study conducted by Anderson & Jiang (2018), almost half of the young adults stated that social media has no effect on their lives, but it has a negative effect by 24%. This rate is a serious data in that it constitutes approximately one quarter of the sample. In the same study, social media on young adults; it is stated that it causes situations such as bullying, distorting behaviour and peer pressure.

Regardless of their age range, the significant increase in the number of users on social media apps day after day raises questions about attitudes, behaviours, and perceptions of all users in the process. In particular, social media and internet use not only provide convenience to individuals' lives, but also bring various problems with it (Bayzan, 2013). Researchers express that; a decrease in self-esteem, life satisfaction, and the emergence of psychological problems are some of the potential outcomes caused by spending an excessive amount of time on social media (Kross et al., 2013; Valkenburg, Peter & Schouten, 2006). Also; It can be listed as a risk to the lives of individuals, identity problems caused by spending too much time, and being affected by negative news and content (Zenelaj, 2014).

Considering all these, it can be said that social media show users traumatic situations in the most vivid way. Also, social media users may not have to experience the trauma of social media first-hand. Users may have the same symptoms as a cause of trauma that has been experienced indirectly (Mancini, 2019). To put it another way, social media users are subjected to experience the outcomes of secondary trauma. At this point, it would be appropriate to express the concept of Secondary Traumatic Stress (STS) with certain dimensions.

STS is a concept that includes the processes that constitute the source of trauma. With the publication of DSM-4, it has been officially accepted that individuals may suffer from indirect trauma (APA, 1994). STS appears to be the most similar mental health condition to PTSD among all other mental health

disorders, but it is not a diagnostic disorder independent of DSM-5 (APA, 2013). In DSM-5, there is a broad expression in that context in the description of Post Traumatic Stress Disorder (PTSD), including indirect trauma. Accordingly, when defining PTSD; There are also situations related to the individual witnessing traumatic situations that occur in others and learning that traumatic events occur in people around him (APA, 2013). STS has been expressed in many terms, including compassion fatigue, indirect traumatization, and burnout. Although there is a certain amount of overlap between these concepts, there are also various differences (Jenkins and Baird, 2002).

According to Figley (1995) STS is expressed as "the stress caused by the knowledge about the traumatizing event experienced by another person". In this context, STS can be expressed as a state of stress resulting from exposure to trauma stories. STS can have physical, emotional, cognitive and social effects on the general mental health of individuals who experience indirect trauma. It also has negative effects such as depression, insomnia, anxiety, substance and alcohol use (Pearlman & Saakvitne, 1995; Măirean, 2016; Joen & Ha, 2012).

The symptom similarities between PTSD and STS have led researchers to investigate the relationship pattern between mood states and STS (Măirean, 2016; Lockwood, Seara-Cardoso & Viding, 2014). In this context, when studies in recent years are examined, it is seen that psychic concepts such as empathy, separation, emotion separation, awareness, and emotion regulation have been investigated in order to better understand STS (Robins, Meltzer & Zelikovsky, 2009; Thomas & Otis, 2010). In addition, it is claimed that the particularly high level of empathy found in individuals exposed to the stories of individuals exposed to trauma leads the individual to the risk of STS (Figley, 1995; Saakvitne & Pearlman, 1996). Although empathy often has a critical position in helping individuals and understanding them, the level of empathy without sufficient emotional discrimination can lead individuals to the risk of STS (Decety & Lamm, 2006; Figley, 2002; Rothschild, 2006). It has been revealed at this point that sympathy is a two-edged sword and sympathetic response exposes individuals to more risk.

In studies on STS, close family members and mental health professionals are seen as the sample most affected by STS (Bell, Kulkarni & Dalton, 2003). One of the reasons for this may be that mental health experts were mostly chosen as samples in studies conducted on STS. However, the abundance of data on social media can expose any user to a lot of content related to trauma. Secondary trauma occurs when an individual is excessively exposed to other people's trauma in any environment (Kahil & Palabıyıkoglu, 2018). From this point of view, in today's world where social networks have become a part of daily life, the frequency of encountering traumatic narratives has increased significantly and this brings the STS factor to the fore. In addition, sharing of digital trauma stories can create an intense transfer of emotions for users who are exposed to it. Therefore, secondary trauma should be seen as an important problem for healthcare professionals or mental health professionals as well as for social media users.

There is a huge gap in the literature regarding STS processes for social media users. On the other hand, the increasing number observed on social media users reveals the importance of secondary traumatic stress processes they are experiencing. However, to be stated in general, the numerous researches on the psychological conditions concerning social media users are quite insufficient. This study will contribute to examining the psychological conditions of social media users in terms of STS. It will also pave the way for an increase in STS-related studies in social media populations. Thus, the social media dimension will also come to mind in the studies to be carried out on STS. It will also play an important role in

determining the STS status of social media users in the relevant culture. In addition, it will contribute to filling the gap in the literature on STS studies.

METHOD

Research Model

This study, in which the Secondary Traumatic Stress Scale for Social Media Users developed by Mancini (2019) was adapted to Turkish, is a quantitative study. In this study, sample selection procedures were completed by using the cross-sectional research model. In this context, individuals aged 18-26 who accepted to participate in the survey were randomly included in the sample.

Study Group

Due to the Covid-19 pandemic that occurred around the world at the time of the study, data were collected from participants through forms created in electronic environment. Participants participated in the study by filling out the form, which took about 5 minutes. Demographic measurements are included in the forms alongside STS, social media use, depression and trauma history. Social media users considered in the young adult age range participated in the study. Among the participants that filled out these forms, individuals that are not aged between 18 and 26 were excluded from the analysis process, and the data of 708 participants were included in the analysis process.

Ethical Statement

The authors declare that they continue to work in accordance with scientific study ethics and the Helenski declaration in this study. Accordingly, the research was reviewed by the Social and Humanities Ethics Committee of Ondokuz Mayıs University and was given permission (REF: 2020/369-5-18433). In addition, the participants participated in the study on a voluntary basis.

Data Collection Tools

Secondary Traumatic Stress Scale for Social Media Users. Developed by Mancini (2019) in 2019, STSS-SM, is an item tool of 17, which was designed to mark the symptoms of attack, avoidance, and arousal linked with indirect exposure to traumatic experiences through the usage of social media. The STSS-SM scale consists of 17 items. Mancini carried out reliability and validity on 144 young assistants in the scale development study. According to the results of the study, the scale consists of 3 sub-dimensions. These are Attack, Avoidance, and Arousal. Unauthorized variables are indicated by 2, 3, 6, 10, and 13; Arousal is represented by observed variables 4, 8, 11, 15 and 16, while variables with observed avoidance are represented by 1, 5, 7, 9, 12, 14 and 17. Intrusion subscale consists of 5 items. Factor loads for this sub-dimension are .36, .50, .36, .43, .55. Avoidance sub-dimension consists of 7 items. The loads of this sub-dimension are .59, .79, 1.04, .88, .65, 1.13, .65. The arousal sub-dimension consists of 5 items. The loads of this sub-dimension are .96, .67, .59, .70, .69. For general STSS; the mean is 39.90, the standard deviation is 12.83, the alpha level is .92. For unauthorized entry; the average was 11.05, the standard deviation was 4.43, and the alpha level was .80. For arousal; the average was 12.31, the standard deviation was 4.22, and the alpha level was .79.

CES Depression Scale (Turkish Version). Developed by Lenore Radloff in 1977, CES-D measures a person's present degree of depressive symptomatic and frequency of the symptom in the past week, with responses scoring from zero to three (0 = Never [less than 1 day]; 5 = most of all time [5 -7 days]). There

are 20 items on the scale that assess depressive mood, feelings of helplessness with the feeling of hopelessness, guilt and worthlessness, psychomotor retardation, anorexia, and sleep disorder (Radloff, 1977). The CES Depression Scale can be scored between 0 and 60. In this context, high scores obtained from the scale indicate that the level of depression in individuals is high (Radloff, 1977). A cut-off score of 16 or higher to help identify people in danger of clinical depression was recommended by Radloff (1997). Radloff (1977) stated that the correlation between items in the scale is high. Also, the alpha coefficient of the general population sample was expressed as .85 while the coefficient alpha value of the patient sample is expressed as .90. In this context, it can be said that the scale has high consistency internally. Test-retest, which is another reliability test, shows moderate correlations varying from .51 to .67 (Radloff, 1977). In general, CES-D is a legitimate, reliable, and observable scale (Radloff, 1977). In the study carried out during the translation into Turkish, it was found to be .84. In addition, Cronbach Alpha internal consistency reliability of .88 was expressed in the test-retest study. A relationship of .69 was found between the two steps. Finally, in the criterion-related validity application, it was stated that there is a correlation coefficient of .77 between the CES Depression Scale and the Beck Depression Scale (Tatar & Saltukoğlu, 2010). The Cronbach alpha value for this study is .87.

Demographic Information Form. Apart from the scales explained above, an 11-item questionnaire about demographic data, social media use, and trauma was asked to be filled out by the participants. Participants were asked questions such as their gender, age, education level, household income, and time spent on social media daily. When the previous trauma, which was a yes or no question of "Have you ever experienced something extremely horrible, dangerous, or violent, where someone was severely injured or killed or might have gotten killed?" was confirmed, participants were told to state how their experience affected their competency to talk with others or sleep others using a 5-point self-attached rating scale (1 = it didn't affect you at all, 5 = it affected you very much).

Process

Firstly, permission for adaptation was obtained from the researcher Mancini (2019), who developed the scale. During the adaptation process of the scale to Turkish, the original scale was first translated into Turkish by 3 English-speaking translators. Afterwards, the Turkish translation of the scale was finalized and given to 3 different English-speaking field translators for back translation. The back translation was finalized and compared with the Turkish form. The translation process was completed by taking the expert opinion of the PCG (Psychological Counselling and Guidance) field expert who speaks English. Due to the Covid-19 pandemic, participants answered the questionnaire questions electronically created via Google Form.

Data Analysis

This study aims to adapt the Secondary Traumatic Stress Scale for Social Media Users to Turkish. Exploratory factor analysis (EFA), confirmatory factor analysis (CFA), Cronbach Alpha reliability analysis, and agreement validity analysis were applied in order to adapt the scale to Turkish. Questionnaire results are divided into half for EFA and CFA; In the first data set, the factor structure obtained by EFA was obtained and the validity of the factor structure was tested through the second data set. All of the applications were carried out via R Project software (R Core Team, 2020). Taking part in the R program in the analysis process psych (Revelle, 2018) and lavaan (Rosseel, 2012) packages were used.

RESULTS

Table 1. Descriptive statistics and frequency analysis results

	N	%
Age		22.70 ± 5.18
Gender		
Male	297	41.90
Female	411	58.10
Education level		
Primary school	3	0.40
Secondary School	2	0.30
High School	109	15.40
Associate degree	109	15.40
Undergraduate	443	62.60
Master's degree	37	5.20
PhD degree	5	0.70
Your household monthly income		
0 - 2000 TL	163	23.00
2001- 4000 TL	277	39.10
4001 and more	268	37.90
How much time do you spend on social media per day?		
Less than 1 hour	61	8.60
Between 2-3 hours	334	47.20
Between 4-5 hours	205	29
Between 6-7 hours	63	8.90
More than 8 hours	45	6.40

Descriptive statistics and frequency analysis results of the variables used in the study are given in Table 1. According to these results, 41.9% of the individuals participating in the study are men and 58.1% are women. The average age of these individuals is 22.7. Of the individuals participating in the study, .4% graduated from primary school, 0.3% from secondary school, 15.4% from high school while 15.4% have an associate degree, 62.6% a bachelor's degree, 5.2% a master's degree, and .7% a doctorate. The monthly household income of 23% of the individuals is between 0-2000 TL, 39.1% have a monthly income between 2001-4000 TL and 37.9% have a monthly income more than 4001 TL. In addition, 8.6% of the individuals participating in the study spent less than 1 hour on social media, 47.2% between 2-3 hours, 29% between 4-5 hours, 8.9% between 6-7 hours and 6.4% stated that they spend more than 8 hours.

In the first stage, sub-dimensions were evaluated through EFA to examine the factor structure of the current scale. Varimax was used in the rotation process for EFA and the Principal Components method was used in the estimation process. In the EFA stage, since the scale items have a sorting level of measurement, dimension reduction operations were performed via the Polychoric correlation matrix instead of the classical Pearson correlation matrix (Holgado-Tello et al., 2010).

According to Bartlett's Test of Sphericity, which is a prerequisite for EFA, a significant correlation was found between the items ($\chi^2=5598.924, p<0.001$). For the sampling adequacy criterion, the Kaiser-Meier-Olkin value was calculated as .920 and since this value was above .9, it was determined that the current sample was highly sufficient. A single eigenvalue greater than 1 was found according to the eigenvalues calculated over the polychoric correlation matrix. According to Kaiser rule, STSS-SM consists of a single factor structure instead of a three-factor structure as in the original, according to the findings

in adaptation to Turkish. The variance explanation ratio of the single factor structure was calculated as 63.9%.

Table 2. EFA results of STSS-SM articles

Item	F1	Community
s8	0.866	0.749
s15	0.848	0.719
s11	0.843	0.711
s13	0.840	0.705
s9	0.838	0.703
s10	0.831	0.690
s4	0.820	0.673
s7	0.817	0.668
s5	0.813	0.662
s17	0.805	0.647
s12	0.804	0.646
s16	0.797	0.636
s6	0.788	0.621
s3	0.777	0.603
s2	0.754	0.568
s1	0.688	0.473
s14	0.633	0.400

Factor loads and community values obtained as a result of EFA of STSS-SM are given in Table 2. According to these results, all factor loads are above .50 and community values are higher than .30. EFA results indicate that scale items can be collected under this single factor structure.

Table 3. Reliability of STSS-SM items

Item	Adjusted item-total correlation	Cronbach Alpha value when the item is deleted
s1	0.607	0.949
s2	0.675	0.947
s3	0.689	0.947
s4	0.728	0.946
s5	0.730	0.946
s6	0.710	0.947
s7	0.712	0.947
s8	0.790	0.945
s9	0.759	0.946
s10	0.753	0.946
s11	0.766	0.946
s12	0.710	0.947
s13	0.715	0.947
s14	0.536	0.951
s15	0.764	0.946
s16	0.702	0.947
s17	0.711	0.947

Table 3 shows the results of the Cronbach Alpha reliability analysis applied to evaluate the internal consistency of STSS-SM. The overall reliability score of the scale was calculated as .950. The corrected total item correlations for all items are positive, and the reliability score does not increase significantly when the item is removed. As a result of the reliability analysis, it is concluded that the scale is very reliable in the adaptation to Turkish study.

CFA was applied to test the validity of the single factor structure obtained from STSS-SM for the adaptation to Turkish study. In the CFA stage, the diagonally weighted least squares technique (DWLS) was applied for the estimation method because the data were at the sequential measurement level (Rosseel, 2012).

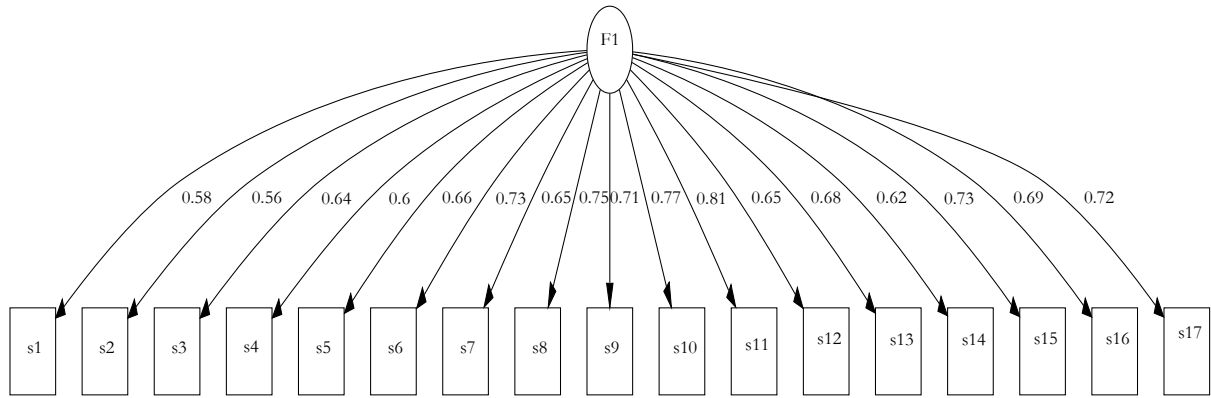


Figure 1. STSS-SM CFA results

Figure 1 shows the CFA results of STSS-SM. According to the graphical structure obtained as a result of CFA, the standardized load values of all items are above .40.

Table 4. Fit index of CFA findings of STSS-SM result

χ^2	sd	GFI	AGFI	TLI	CFI	SRMR	RMSEA
126.037	119	0.991	0.989	0.999	0.999	0.069	0.012

Table 4 shows the goodness of fit values obtained as a result of CFA of STSS-SM. According to these values, $\chi^2/sd= 1.059$ value is less than 2 and the RMSEA value is less than .05. In addition, the SRMR value is below .08 and GFI, TLI, CFI, AGFI values are above .975. Generally speaking, validity results of the adaptation to Turkish study of STSS-SM point to perfect fit (Mulaik et al., 1989).

Table 5. STSS-SM and CES-D concordance validity results

	STSS-SM-Score	CES-D-Score
TSS-Score	1	0.698
CES-D-Score	0.698	1

In Table 5, the result of Pearson correlation analysis between STSS-SM scores and CES-D scores applied for concordance validity is shown. According to the result of the correlation analysis, there is a significant positive correlation between the STSS-SM adapted to Turkish and the CES-D scale ($p < 0.05$). It can be said that this scale, which was adapted due to its positive and significant correlation coefficient, provided concordance validity.

DISCUSSION, CONCLUSION & SUGGESTIONS

When the literature is reviewed, there is no study examining the STS processes of social media users. The literature on trauma reveals a link by connecting PTSD with STS. The acquisition of STS, generally speaking, is established on the theoretical grounds of PTSD. STS symptoms can be theorized similarly to PTSD with three factors, as the researches argue. These factors are; attack, avoidance and arousal (Figley, 1995). Although Mancini (2019) revealed that the STSS-SM she developed could be grouped sufficiently in terms of three factors, she stated that there were significant overlaps between these variables. According to the findings of the adaptation of STSS-SM to Turkish, it consists of a one-factor

structure instead of a three-factor structure as in the original. The variance explanation ratio of the single factor structure was calculated as 63.9%. According to the results of the factor loads and community values obtained as a result of EFA of STSS-SM, all factor loads are above .50 and community values are higher than .30. EFA results indicate that scale items can be collected under this single factor structure.

Factor loadings in the original scale; It was found to be between .36 and .55 for intrusion, between .59 and 1.13 for avoidance, and between .59 and .96 for arousal (Mancini, 2019). In this study, the lowest factor load in a single factor structure was found to be .56. It is thought that the perfect result of the single factor structure may be due to the cultural difference. Adapting the original scale to different cultures will be important in understanding this situation. In addition, it can be said that intrusion, avoidance and arousal sub-factors are interrelated in terms of STS (Figley, 2002). In this context, it can be thought that the items in the related three-factor structure reflect each other. There is also a sampling difference between development and adaptation. This study, carried out with 708 young adult, may have yielded more meaningful results in testing factors. The sample used in this study is approximately 5 times the scale used in the scale development study (Mancini, 2019). In this context, the application of the scale in larger samples in the future will answer the questions about the sub-factor.

As the conclusions of this analysis show, STSS-SM is an STS criterion based on a single factor model in social media users. In this context, it was observed that STSS-SM was consistent and STS was associated period spent on social media, depression symptoms, previous trauma encounters, and symptoms derived from being affected by trauma.

The time consumed on social media is not related to the significance of STS experienced by the individual ($r = .15$, $p = .07$) as the study conducted by Mancini (2019) reveals. Similar results were found in this study. Also, the sampling in this study is sufficient. At the same time, the study has an extremely homogeneous distribution. 708 individuals participated in the study and 41.9% of the individuals participating in the study were male and 58.1% were female. To provide more robust findings future researches should be carried with more extensive sample size and using quota sampling to obtain a more generalizable sample.

Investigating the underlying characteristics of STS in the users of social media is a valuable aim for the next researches. It is known that young adults are indirectly traumatized by using social media while it is unknown how the detected variables of STSS-SM interact. Studies to be carried out at this point will help determine ways to reduce STS among social media users.

Other than the existing sample under investigation, it is recommended strongly that the outcomes of this study be generalized to individuals. Different groups like people who regularly watch or read the news to give an example, or people traumatized after watching a television show or film can acquire distinct consequences. To continue to be added to the STS literature and to define the contrast between STS and PTSD, future researches should be carried to examine STS with the use of new examples or a more generalizable measure.

STSS-SM can be used in studies to be carried out regarding STS processes of social media users. Future researches exploring different determinants in relation to STS in social media users could assist expand data on the impact of social media on the mental well-being of young adults and possibly improve the outcomes of indirect trauma.

REFERENCES

- American Psychiatric Association. (1994). Diagnostic and Statistical Manual of Mental Disorders 4th Edn Washington DC: *American Psychiatric Association*.
- American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders. Washington DC: *American Psychiatric Association*.
- Anderson, M. & Jiang, J. (2018). Teens, social media and technology 2018. *Pew Research Center*, 31, 2018.
- Bayzan, Ş. (2013). İnternetin bilinçli ve güvenli kullanımı. *İnternet bağımlılığı sorunlar ve çözümler* (p 259-278) içinde. Ankara: An Yayıncılık.
- Bell, H., Kulkarni, S. & Dalton, L. (2003). Organizational prevention of vicarious trauma. *Families in society*, 84(4), 463-470.
- Figley, C. R. (1995). *Compassion Fatigue: Coping with Secondary Traumatic Stress Disorder in Those Who Treat the Traumatized*. New York, NY: Brunner/Mazel.
- Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology*, 58, 1433-1441.
- Holgado-Tello, F. P., Chacón-Moscoso, S., Barbero-García, I. & Vila-Abad, E. (2010). Polychoric versus Pearson correlations in exploratory and confirmatory factor analysis of ordinal variables. *Quality and Quantity*, 44(1), 153.
- Jenkins, S. R. & Baird, S. (2002). Secondary traumatic stress and vicarious trauma: A validation study. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 15(5), 423-432.
- Jones, W. H. & Carver, M. D. (1991). Adjustment and coping implications of loneliness. *Handbook of social and clinical psychology*, 42, 682-689.
- Kahil, A. & Palabıyıkoglu, N. R. (2018). İkincil travmatik stres. *Psikiyatride Güncel Yaklaşımlar*, 10(1), 59-70.
- Kemp, S. (2020). Digital in 2020: 3.8 Billion people use social media. [Web log post.]. Retrieved from <https://wearesocial.com/blog/2020/01/digital-2020-3-8-billion-people-use-social-media>
- Kross, E., Verduyn, P., Demiralp, E., Park, J. & Lee, D. S. (2013). Facebook Use Predicts Declines in Subjective Well-Being in Young Adults. *PLoS ONE*, 8(8).
- Lockwood, P. L., Seara-Cardoso, A. & Viding, E. (2014). Emotion regulation moderates the association between empathy and prosocial behavior. *PloS one*, 9(5).
- Mancini, M. N. (2019). *Development and Validation of the Secondary Traumatic Stress Scale in a Sample of Social Media Users* (Doctoral Dissertation, Cleveland State University).
- Măirean, C. (2016). Emotion regulation strategies, secondary traumatic stress, and compassion satisfaction in healthcare providers. *The Journal of psychology*, 150(8), 961-975.
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S. & Stilwell, C. D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological bulletin*, 105(3), 430.
- Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- R Core Team (2020). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL <https://www.R-project.org/>.
- Pearlman, L. A. & Saakvitne, K. W. (1995). Treating therapists with vicarious traumatization and secondary traumatic stress disorders. *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*, 23, 150-177.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.

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- Revelle, W. (2018) psych: Procedures for Personality and Psychological Research, Northwestern University, Evanston, Illinois, USA, <https://CRAN.R-project.org/package=psych> Version = 1.8.12.
- Robins, P. M., Meltzer, L. & Zelikovsky, N. (2009). The experience of secondary traumatic stress upon care providers working within a children's hospital. *Journal of Pediatric Nursing*, 24(4), 270-279.
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling and more. Version 0.5–12 (BETA). *Journal of statistical software*, 48(2), 1-36.
- Rothschild, B. (2006). *Help for the helper: The psychophysiology of compassion fatigue and vicarious trauma*. WW Norton & Co.
- Russell, D., Peplau, L. A. & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: concurrent and discriminant validity evidence. *Journal of personality and social psychology*, 39(3), 472.
- Saakvitne, K. W. & Pearlman, L. A. (1996). *Transforming the pain: A workbook on vicarious traumatization*. WW Norton & Co.
- Tatar, A. & Saltukoglu, G. (2010). The adaptation of the CES-Depression Scale into Turkish through the use of confirmatory factor analysis and item response theory and the examination of psychometric characteristics. *Klinik Psikofarmakoloji Bülteni-Bulletin of Clinical Psychopharmacology*, 20(3), 213-227.
- Thomas, J. T. & Otis, M. D. (2010). Intrapyschic correlates of professional quality of life: Mindfulness, empathy, and emotional separation. *Journal of the Society for Social Work and Research*, 1(2), 83-98.
- TUIK. (2019). Taken from http://www.tuik.gov.tr/PreTablo.do?alt_id=1028. on May 12, 2020
- Valkenburg, P. M., Peter, J. & Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *CyberPsychology and behavior*, 9(5), 584-590.
- Zenelaj, B. (2014). *Pazarlama Stratejisi Olarak sosyal medya İletişimi ile Kurumsal itibari olusturmak: İletişim Sektöründe Bir Araştırma* (Doctoral Dissertation, Selçuk Üniversitesi Sosyal Bilimler Enstitüsü).

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Author Contributions

This study was conducted by all the authors working together and cooperatively. All of the authors substantially contributed to this work in each step of the study.

Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

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Ethical Statement

This study was completed in accordance with the Helsinki Declaration. In line with this, the study was permitted by Ondokuz Mayıs University, Social and Human Sciences Ethics Committee.

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RESEARCH

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ARAŞTIRMA

Açık Erişim

Experiences of School Psychological Counsellors Working with High School Students Experiencing Traumatic Mourning: A Focus Group Study Report

Travmatik Yas Yaşayan Lise Öğrencileriyle Çalışan Okul Psikolojik Danışmanlarının Deneyimleri: Bir Odak Grup Çalışması Raporu

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ABSTRACT

This study aims to identify experiences of school psychological counsellors working with high school students who experience traumatic mourning, through a focus group study. This study, through the focus group study method, presents experiences of school psychological counsellors working with high school students experiencing traumatic mourning. The sample of this study is comprised of 11 school psychological counsellors who worked in high schools in Bingöl city, Turkey, during the 2017-2018 school year and is conducted psychological Experiences of School psychological counsellors Working with High School Students who Experience Traumatic Mourning: A Focus Group Study Report counselling with traumatic mourning students in their professional lives. Data was obtained through the focus group discussion method. In the analysis of the data obtained from the research, content analysis was obtained from qualitative analysis methods. Findings indicate that the ways in which individuals experience traumatic mourning access the psychological counsellor in the following ways; student identification forms (f=23), or by notification of class teachers (f=21). Psychological counsellors describe the symptoms of individuals with traumatic mourning as inability to imagine (f=18), increased sense of guilt (f=16), academic failure (f=14), substance abuse (f=11), and a state of being depressed (f=6), respectively. Moreover, it is found that when working with individuals who experience traumatic mourning, the most difficult part for school psychological counsellors is one-to-one study (f=32) whereas, the easiest aspects for psychological counsellors are referring (f=19) and working with the family (f=5). When working with individuals who experience traumatic mourning psychological counsellors indicate their special procedures as using religious concepts (f=41), post-traumatic stress disorder treatment protocols (f=17), a trauma and crisis intervention route map (f=25), and providing social support. It was found that psychological counsellors are in need of knowledge and experience in intervening in adolescents with traumatic mourning.

Article Information

Keywords

Traumatic Mourning
Adolescence
High School
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ÖZET

Bu çalışma, travmatik yas yaşayan lise öğrencileriyle çalışan okul psikolojik danışmanlarının deneyimlerinin bir odak grup çalışması yöntemiyle tespit etmeyi amaçlamaktadır. Çalışma grubunu ise, 2017-2018 öğretim yılında Bingöl merkezde liselerde çalışan ve mesleki yaşantılarında travmatik yas yaşayan lise öğrencileriyle psikolojik danışma uygulaması yürüten 11 Okul Psikolojik Danışman oluşturmuştur. Araştırmaya ait veriler odak grup görüşmesi yöntemiyle elde edilmiştir. Araştırmadan elde edilen verilerin analizinde nitel analiz yöntemlerinden içerik analizi kullanılmıştır. Travmatik yas yaşayan bireylerin psikolojik danışmana hangi yollardan ulaştıkları ile ilgili bulgular; öğrenci tanıma fişleri (f=23), sınıf öğretmenlerinin bildirmesi (f=21) ulaştıkları görülmektedir. Okul psikolojik danışmanları travmatik yas yaşayan bireylerin semptomlarını ise sırasıyla hayal kuramama (f=18), suçluluk duygusunun artması (f=16), akademik başarısızlık (f=14), maddeyi kötüye kullanma (f=11) ve özgüven eksikliği (f=6) şeklinde ifade ederken, okul psikolojik danışmanları travmatik yas yaşayan bireylerle çalışırken onları en çok zorlayan kısım birebir çalışma (f=32), psikolojik danışmana en kolay gelen taraf ise referans etme (f=19) ve aile ile çalışma (f=5) olduğu görülmektedir. Okul psikolojik danışmanları travmatik yas yaşayan bireylerle çalışırken özel prosedürlerini; dini kavramları kullanmak (f=41), travma sonrası stres bozukluğu (TSSB) tedavi protokolleri (f=17), travma ve krize müdahale yol haritası (f=25) ve sosyal destek sağlama şeklinde belirtmektedir. Okul psikolojik danışmanlarının travmatik yası olan ergenlere müdahale konusunda bilgi ve deneyime gereksinim duydukları görülmüştür.

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INTRODUCTION

According to the Turkish Statistical Institute 2015 data, the number of deaths in Turkey was 405 thousand 202, while in 2016 this number reached 422 thousand 135 people, increasing by 4.2%. A total of 5476 of this number consists of adolescents in the high school period (TSI, 2017). In children and adolescents' lives, the death of a family member or the loss of a loved one or important person to them is a very difficult situation for children and adolescents to deal with (Mannarino & Cohen, 2011). So much so that, in a statistical study (Children's Bereavement Center of South Texas, 2008), it is stated that under 25 years old individuals experience the loss of one of their family members almost every year, and this rate is around 400 thousand. In the same study, it is reported that under 18 years old individuals witness the death of one or both of their parents, and this rate is about 2 million. Similarly, a study on the developmental and traumatic crisis of adolescents in Turkey in recent times (Kaya, Yildırım and Atli, 2018) found that one of the most common traumatic crises experienced by adolescents is 'mourning', and, it is emphasized that psychological counsellors working in schools, which are one of the places where adolescents spend the most time, do not see themselves as sufficient in 'crisis intervention' and need help in this regard (Kaya & Yildirim, 2017).

The high school period is an important time for the individual's personality, social and professional development. In this period, the changes in the identity and personality of the adolescent carry traces of positive and negative experiences formed after this. For this reason, it becomes necessary to provide psychological counselling services to adolescents to overcome the very depressed and stressful adolescence period effectively and properly. On the other hand, during adolescence, many troublesome formations occur that will challenge the identity and personality of the adolescent. One of these formations is traumatic mourning. Traumatic mourning, on the other hand, is defined as the reactions that occur as a result of the sudden loss of a relative with whom he/she is in a close relationship; and family and friend relationships and the occupational and social functionality of the individual are significantly affected by these reactions (Bonanno, 2004; Barle, Wortman, and Latack, 2017).

There are no direct diagnostic criteria for traumatic mourning in ICD-11 and DSM-5 (Rosner et al., 2014). However, in the diagnostic criteria of 'post-trauma tension disorder' in the DSM-5, APA (2013) states that 'the real death or the possible death of a family member or friend caused by brute force or by accident', or 'distressing memories' can be taken as the definition of traumatic mourning. On the other hand, the criteria presented by Prigerson et al. (2009) and Shear et al. (2011) are included in the literature. Here, only the criteria presented by Prigerson et al. (2009) were written in terms of the criteria presented by both researchers to show similar characteristics and are as follows: Criterion A, Incident: The individual has experienced the loss of someone important to him. Criterion B, Separation Anxiety: Intense feeling of longing for the lost person (e.g., longing for the lost person, desire to meet with the deceased but not realized, or the emotional pain caused by the desire to meet again). Criterion C, cognitive, emotional and behavioural symptoms: Five (or more) of the following symptoms should be present every day or cause disability in the person with a loss: 1. Confusion about the role of the individual in his / her life or a decrease in self-perception (that is, the individual feels that a part of himself/herself is lost), 2. Difficulty in accepting the loss, 3. Fleeing from the loss reminding object or people, 4. Do not trust other individuals after the loss, 5. Intense anger, pain and resentment about the loss, 6. Difficulty in continuing his daily life (e.g. creating a new social environment and continuing his existing interests), 7. Emotional bluntness after the loss, 8. Life is empty and meaningless after the loss. 9. Feeling stunned or

shocked. Criterion D, Duration: At least six months have passed since the loss to be diagnosed by mental health professionals. Criterion E, Impairment: Disorder causes functional impairment in social, occupational or other areas. Criterion F, its relationship with other mental illnesses: It is said that the disorder cannot be explained by a generalized anxiety disorder, major depressive disorder and post-traumatic stress disorder. Considering all these criteria, traumatic mourning in adolescents has a high level of depression and suicide risk (Boelen & Prigerson, 2017; Di Ciacco, 2008), and symptoms of fear, anxiety, withdrawal and avoidance (Taylor, 2006), anger, sadness and longing (Mallon, 2008) can be seen.

When the literature in our country is examined, many research findings related to the description of mourning are encountered including, complicated mourning (Pinar, 2013), mourning reactions and the mourning process (Zara, 2011; Tuba, 1999; Karpat, 2011; Genlik, 2012), traumatic mourning (Yilmaz, 2014; Cesur, 2012), pathological grief (Bildik, 2013; Celik & Sayil, 2011), death (Karakus, Ozturk & OK, 2012), an acute period of mourning (Karabulut, 2010), and death anxiety (Ozturk, Karakus, & Ok, 2011; Karakus, Ozturk & Ok, 2012). On the other hand, for the solution of the problems of individuals with losses; it is seen that they are doing activities such as mourn case reports (Şenelmiş, 2006; Karaca, 2012), how to approach the mourning individual (Duman, 2014; Berksun, 1995; Okyavuz, 1999), helping the grieving family (Erden, 2002; Kivilcim & Dogan, 2014). However, no research has been found on the experiences of psychological counsellors working with adolescents with traumatic mourning. In this direction, it is thought that this study will contribute to undergraduate, graduate and doctorate programs aiming to train psychological counsellors, adolescents with traumatic mourning and their families, especially with the suggestions put forward, and have an important and original value in terms of understanding the reflections of the subject on the field. Furthermore, this research is thought to contribute to the literature in terms of understanding what kind of process psychological counsellors working in the field experience when they work with adolescents with traumatic mourning and what their functions are in this process.

Studies (Malkinson, 2009) show that adolescents need help because of the problems they experience. Moreover, psychological counsellors are one of mental health professionals who help individuals in emotional situations that prevent learning and personal adaptation (including the mourning components) such as social withdrawal, sudden bursts of anger, hopelessness about the future, anxiety or fear, and in solving many other problems (Ozguven, 1999. ; Ercan, 2001; Avci and Gulbahce, 2019). Based on this, the experiences of the school psychological counsellors regarding the experiences of adolescents with traumatic grief were shared within the scope of this study. It is thought that this situation will contribute greatly to the field of both the experiences of adolescents after a traumatic loss and the way school counsellors manage the event. On the other hand, preventive, disincensive and improving mental health services; it is defined as services for early detection of the condition of individuals who have just started to show mental health problems or risky behaviours and to heal the problem before it becomes chronic (Psychological Counselling and Guidance Association, 2017). The reference to "early detection and intervention of mental health problems" here indicates that school psychological counsellors should be more competent in psychopathology. However, the scarcity of psychopathology-oriented courses in PCG undergraduate programs causes psychological counselling to not be sufficiently beneficial in this area. For this reason, it is a necessity for the field of PCG, which is identified as 'school psychological counselling', to provide a professional mental health service outside the school and to make new initiatives by turning to society (Dogan, 2001). Even Prigerson et al. (1999) stated that individuals with traumatic grief symptoms are five times more likely to have suicidal thoughts than normal individuals,

which is the direct task of mental health professionals to understand how young adults react to traumatic events and how to formulate their treatment. This study aims to contribute to the field in this respect. When looking at the national literature, there is no qualitative study addressing traumatic mourning in line with the experiences of school counsellors. Only a few studies deal with traumatic grief in terms of descriptive (Celik & Sayıl, 2003; Volkan & Zıntl, 2010; Cesur, 2012) and family resilience (Kaner & Bayraklı, 2010). Accordingly, this field of study will fill an important place, and at the same time, the scope of this study, will show how school psychological counselling reaches adolescents who experience traumatic mourning, define the symptoms of adolescents in this process, the difficulties faced by psychological counsellors in working with adolescents experiencing traumatic mourning, and processing their suggestions to the new generation of counsellors. We can say that it will make a great contribution. Considering all these processes, this study aims to examine the experiences of school psychological counsellors working with high school students experiencing traumatic mourning, using a focus group method.

METHOD

Research Model

In this study, which aims to reveal the experiences of school psychological counsellors working with individuals experiencing traumatic grief, a case study design, which is one of the qualitative research designs, was used. The case study is an experiential research method that works on a current phenomenon in the context of its life frame, is used in situations where the boundaries between the content are not clear, and where there are multiple sources of evidence or data (Yin, 1984). In this descriptive study, which was examined based on content analysis, 8 open-ended questions were prepared for the experiences of school psychological counsellors working with high school students experiencing traumatic mourning. In this context, the following 8 basic questions were asked to the participants, with the open-ended interview technique.

1. In what ways do individuals experiencing traumatic mourning access you?
2. How would you describe the symptoms of individuals experiencing traumatic mourning?
3. How do you deal with this issue different from working with other problems?
4. Do you have any special procedures when working with individuals experiencing traumatic mourning?
5. What do you feel and say about yourself when working with an individual with traumatic mourning (during the counselling process)?
6. If a school psychological counsellor who has just started the profession encounters a similar case, what kind of suggestions would you give him/her both professionally and personally?
7. If you wanted to present your experiences to the school counsellors as a briefing, what questions do you think should be asked in this briefing?
8. When you think about your traumatic mourning experience, can you tell us an anecdote that is striking for you?

Study Group and Data Collection

The criterion sampling technique, one of the non-probabilistic sampling methods, was used in this study. The aim here is to study and review all situations that meet some of the previously determined criteria of importance (Patton, 2014). These criteria can either be created by the researcher or based on a previously

created criteria list (Yildirim & Simsek, 2008). Accordingly, the study sample was devised as psychological counsellors who in their professional lives work in high schools and conduct counselling with individuals who experience traumatic mourning. Thus, psychological counsellors working with traumatic grief were determined and voluntarily included in the study by obtaining permissions from the Provincial National Education. Participants' ages range from 25 to 35. The participants consisted of 11 school counsellors, 6 men and 5 women, who participated in the study to share their experiences related to traumatic mourning.

To collect data a semi-structured interview form was used. This form contains eight basic questions and 3-4 sub-questions, which are open-ended and require comment according to the content of the subject. The main reason for this is that 3-4 sub-questions are probably at least 4-6 interview questions and can be investigated through a series of probes (Yildirim & Simsek, 2006). While preparing the questions, the related literature was scanned, and opinions and suggestions were received from field experts who were educated at the academic staff and doctoral level. After the form was prepared, the focus group interview method was used to collect the research data. Morgan (2002) defines the focus group interview as a group interaction about a problem included in the study, while Powell, Single, and Lloyd (1996) define it as a problem that is the subject of research based on the experiences of a group of experts selected and brought together by the researcher and their expressions of opinions and discussions on the subject. The interview started with the determination of the subject named "Examining the experiences of school psychological counsellors working with individuals experiencing traumatic mourning" by the researcher because the focus group interview is a series of discussions planned to learn the thoughts of a pre-determined group of participants on a predetermined topic (Bas, Camir, & Ozmalidar, 2013). In this direction, the study effectively recorded felt the feelings and thoughts of the individuals participating in the focus group interview (Stewart et al., 2007), and by asking open-ended questions about group management; There was a moderator who provided detailed information about the thoughts, observations and experiences of individuals, and a reporter who recorded the statements in the group into minutes.

The study was carried out by informing the participants about the purpose and subject of the research in the meeting room of the Bingöl Guidance and Research Center, which was prepared in a U-layout. Participants who accepted the interview were informed about confidentiality, they were informed that the interviews would be recorded on a professional basis (both voice and written), their permission was obtained from the Bingöl Provincial Directorate of National Education, and the interviews began after the participants briefly introduced themselves. The interviews, which were based on questions and answers, lasted 120 minutes. Also, numbers, ranging from Participant 1 to Participant 10, were given to each School psychological counsellor to protect the identity information of the participants in the presentation of the research findings.

Ethical Statement

This study was carried out in 2017 with the permission of the Republic of Turkey Bingöl Governorship, Provincial Directorate of National Education. No. 48605746-44-E.19000041 dated 09/11/2017 and 92860497-903903.01-E. It has been stated that it is appropriate to carry out the study by the relevant article. Also in this study, the Constitution of Turkey, compliance with the general objectives of the National Education Basic Law was approved by the Turkish National Education.

Data Analysis

The data obtained through the interviews were analyzed in two stages. The first was through the inductive analysis technique, which is the stage of writing the data on paper, coding, writing interviewer comments and forming themes (Silverman, 2001). Second, content analysis, which is one of the qualitative data analysis methods, was used to analyze the data. Content analysis is to gather similar data under several concepts and themes and to ensure that the content is understood (Yildirim & Simsek, 2006). The interviews were recorded and to analyze the data, they were deciphered by two field experts and the codings and themes were created. In the coding, the expressions of the psychological counsellors, the concepts used in the literature, and the original expressions created by the researcher were taken as codes, and these coded data were categorized according to their content. The frequency values of the grouped data are presented in the figures.

The frequencies obtained show how many times the participant expressed which concept or data to the questions asked. The validity of the study was attempted to be ensured by explaining the categories reached using the one-to-one expressions of the interviewed group (Yildirim & Simsek, 2006). In terms of reliability, the transcription of the data, which is an important issue emphasized by Creswell (2016), was checked by comparing it with the recording. Some of the answers given by the psychological counsellors to the interview questions were presented as direct quotations. Indirect quotations, information about the psychological counsellors is given as participant number and gender; i.e. expressed as the sixth participant and male (P6: M).

RESULTS

Findings in the study related to the demographic information of the psychological counsellors' are in Table 1. The ways of accessing the counsellor by individuals experiencing traumatic grief are shown in Figure 1. The description of the symptoms of individuals experiencing traumatic grief is in Figure 2. It is seen that how psychological counsellors deal with this issue unlike other subjects in Figure 3. Special procedures of psychological counsellors when working with individuals experiencing traumatic grief is in Figure 4. What psychological counsellors feel and think about when working with an individual with traumatic grief is indicated in Figure 5. What kind of suggestions do you have when a school counsellor who has just started the profession encounters a similar case? This is addressed in Figure 6. What questions to ask you when you want to present your experiences to the school psychological counsellors in the form of a briefing are presented in Figure 7. Finally, the noteworthy anecdotes of the psychological counsellors about traumatic grief are presented in Figure 8.

Table 1. Demographic variables of participants

Participants	Age	Gender	Education Level	Time in Position
Participant 1	28	Female	Undergraduate	6
Participant 2	45	Male	Undergraduate	18
Participant 3	30	Female	Undergraduate	4
Participant 4	25	Female	Undergraduate	4
Participant 5	26	Female	Undergraduate	4
Participant 6	32	Male	Undergraduate	10
Participant 7	30	Male	Undergraduate	9
Participant 8	38	Female	Undergraduate	14
Participant 9	35	Male	Undergraduate	9
Participant 10	34	Male	Undergraduate	8
Participant 11	28	Female	Undergraduate	7

According to Table 1, the information about the general structure of the participants is as follows: 11 psychological counsellors, 6 male and 5 female, participated in the study. Their ages ranged from 45 to 27, and their average age was 30. When the education levels are examined, while all of the participants are graduates of Psychological Counselling and Guidance, their time in the position varies between 18 and 4 years.

Data on the ways in which high school students experiencing traumatic mourn reach a counsellor and coding of data have been made, and it was collected under certain themes and sub-themes and presented in Figure 1.

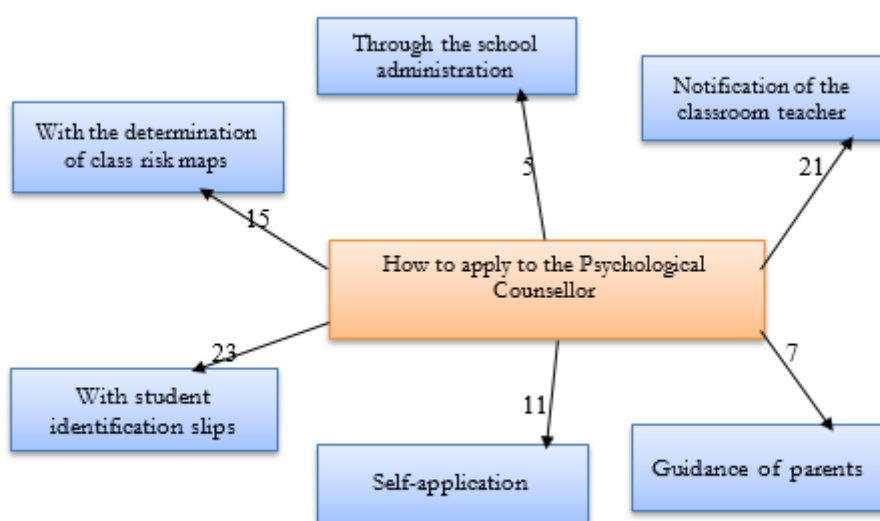


Figure 1. How to apply to the psychological counsellor

Looking at Figure 1, the way individuals who experience traumatic mourning apply to a psychological counsellor is determined as the main theme and the related sub-themes are; Student identification slips ($f = 23$), notification of classroom teachers ($f = 21$), determination of class risk maps ($f = 15$), self-application ($f = 11$), guidance of parents ($f = 7$), and school administration ($f = 5$). Below are examples of the views of psychological counsellors on the ways individuals reach the unit.

Participant expressions regarding the class teacher reporting category are as follows:

Last semester the 9-A class counsellor came to me, there was a student who was quiet and sad in his class recently, but this student was a talkative and cheerful person before. And there was a decrease in attendance, although not serious "(P7: M).

Participant statements regarding the category of class risk mapping: *Two months after the start of school, we prepared school classroom risk maps through our classroom counsellors. There were death and traumatic situations that caught my attention. Then I reached out to two of my students. Their father has died in a traffic accident, they were two brothers. I started to counsel my students "(K11: F).*

The participants' statements regarding the guidance of parents category: *'A student who lost his aunt and cousin five years ago was brought to the Counselling Service by his family. One night in Istanbul, a bus hit them and they stayed in intensive care for a few days and later died. Five years have passed, but my student still hasn't normalized. He still doesn't smile. He surely cries when he sees me because when he looks at me like that, he says that I look like her cousin "(K10: M).*

It was asked that Psychological counsellors 'how would you describe the symptoms of individuals experiencing traumatic mourn' to describe the symptoms of individuals experiencing traumatic mourn. In line with the responses received, the data were coded, combined in common themes and are presented in Figure 2.

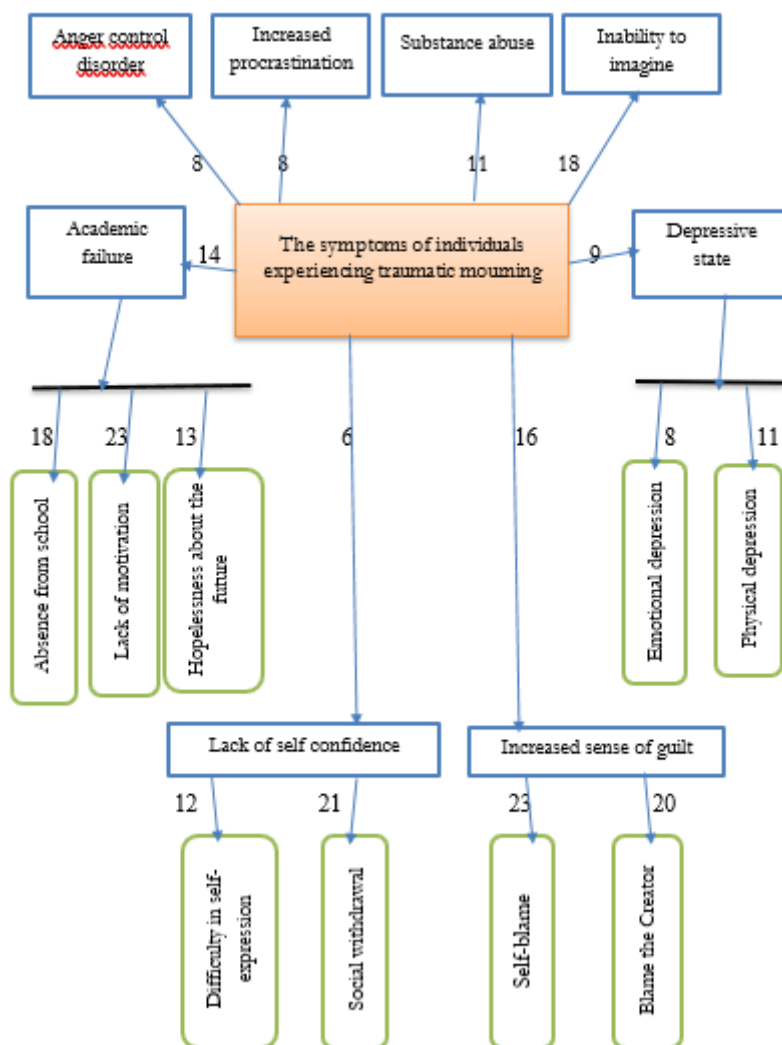


Figure 2. The symptoms of individuals experiencing traumatic mourning

Considering Figure 2, psychological counsellors show the symptoms of individuals experiencing traumatic mourning, respectively; inability to imagine (f = 18), increased sense of guilt (f = 16), academic failure (f = 14), substance abuse (f = 11), and a state of depression. (f = 9), increased procrastination (f = 8), and lack of self-confidence (f = 6). Feeling of guilt is defined as self-blame (f = 23) and blame the Creator (f = 20), academic failure; lack of motivation (f = 23), absence from school (f = 18) and hopelessness about the future (f = 13), depression; physical depression (f = 11) and emotional depression (f = 8), lack of self-confidence; social withdrawal (f = 21) and difficulty in self-expression (f = 12). Below are examples of the views of psychological counsellors about the symptoms of individuals experiencing traumatic mourning.

Participant expressions regarding the category of anger control disorder and inability to daydream: 'I think this child is worse and one of the things I experience is that I don't know if he has a sense of pain, but when he inflicts violence on someone, there is no limit. He has no consistency. So he can kill. Anger is never out of control. His violence, for example, when someone can hit someone with his hand or arm, hits him with a belt. He took off his belt and beat him with a belt. Or hitting his head against the wall "(K1: F).

Statements of the participants regarding the category of substance abuse: 'I think substance abuse can be seen a little more among adolescents. It happens because he does not know how to deal with the problem or find solutions but instead increases or starts the substance use"(P8: F).

Participant statements regarding the category of blaming the Creator: 'The person already feels powerless, uncontrolled, helpless, and rebels, why me? God, why did you do this? So why am I experiencing this? Why did a car pass over him? (K8: F).

Statements of the participants regarding the category of not being confident: 'He was not confident. He did not trust himself in any way and was directly blaming God for the most negative things, using the supreme will. He says "you do all kinds of injustice to me", that is, he does not take any refuge in fate here. On the contrary, when one says fate, it almost even comes to a situation where he will swear "(P7: M).

Participant expressions regarding the categories of academic failure and not being able to daydream: 'In other words, his academic success is always low, that is, his mental development is in place but there is no academic success. There is no expectation. No dreaming. There is no dream. So three years later, he doesn't have a dream when you ask where you are '(P1: F).

While studying the traumatic mourning of psychological counsellors, the way they deal with the subject as opposed to other problems, the related data are codified, collected under certain themes and sub-themes and presented in Figure 3.

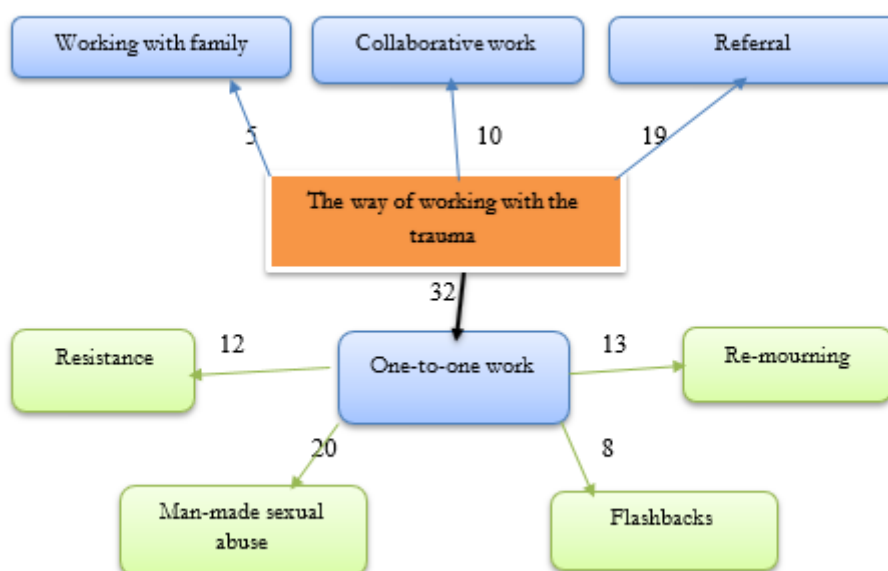


Figure 3. The way of working with the trauma

Looking at Figure 3, how psychological counsellors work with individuals experiencing traumatic mourning are, respectively; one-to-one work (f = 32), the most difficult part of the counsellor, referral (f

= 19), collaborative work (f = 10) and working with family (f = 5). On the other hand, when looking at the most difficult situations in one-to-one work; it is observed that man-made especially sexual abuse (f = 20), re-mourning (f = 13), resistance (f = 12) and flashbacks (f = 8). The views of psychological counsellors who work with individuals who experience traumatic mourning are given below.

Participant expressions regarding the flashback category: "The moments that a person experiences again in traumatic events are challenging situations for me" (P8: F).

The participants' statements regarding the resistance category: 'Let's say if he lived in the past for a long time and if you think that the trauma that the child experienced will still affect his life, he shows serious resistance here. These students were the most difficult for me' (P5: F).

Statements of the participants regarding the cooperative working category: 'One of the most difficult cases for me is the emergence of sexual abuse cases in schools. In such cases, I refer to psychiatry because it does not work in this school anymore, it is a psychiatric science (P1: F). "The beginning is a bit more important; I am surprised what I will do. In general, when there are difficult traumas that I cannot handle, there is a child and adolescent psychiatrist in the maternity hospital, I refer them to them" (K11: F).

Participant expressions regarding the re-justification category: The part I have difficulty with myself is the situation we call re-justification (P5: F).

Coding of data about what are the special procedures of psychological counsellors when working with individuals experiencing traumatic mourning, were collected under certain themes and sub-themes, which are presented in Figure 4.

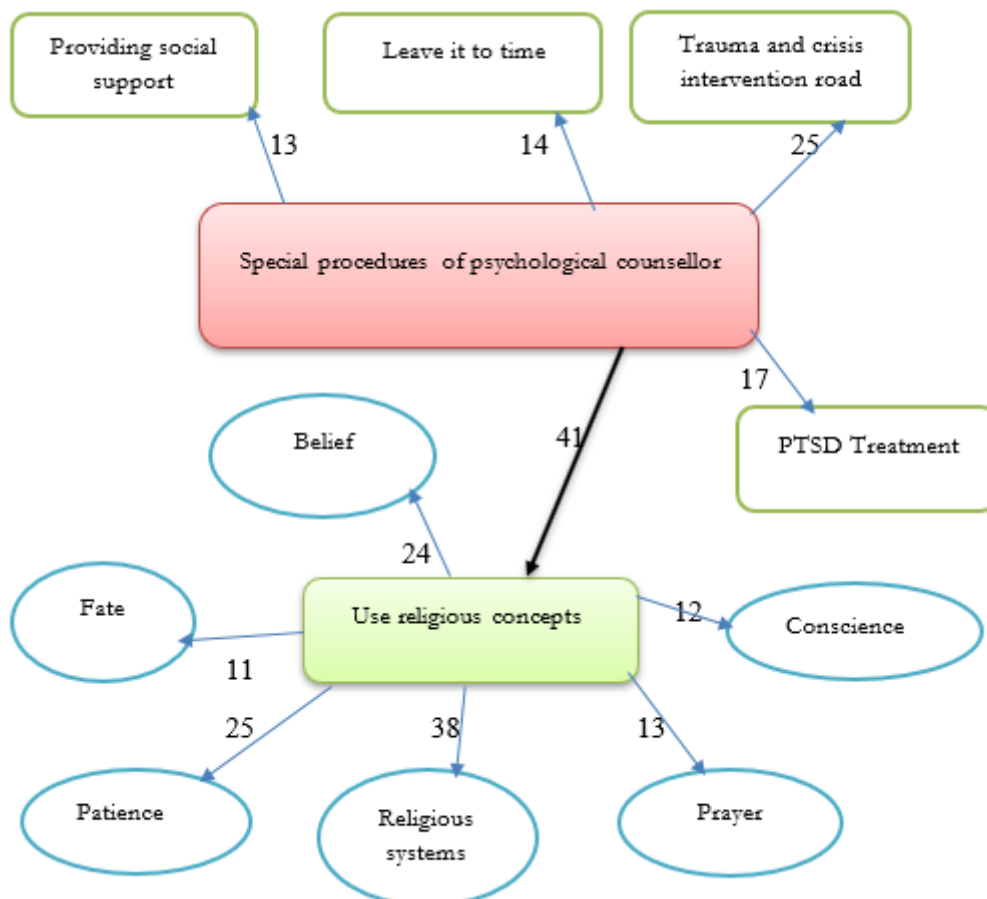


Figure 4. Special procedures of psychological counsellor

Considering Figure 4, the special procedures of psychological counsellors when working with individuals who experience traumatic mourning are to use religious concepts (f = 41), post-traumatic stress disorder (PTSD) treatment protocols (f = 17), leave it to time (f = 14), a trauma and crisis intervention roadmap (f = 25) and providing social support. On the other hand, sub-themes in spiritual counselling appear to be are religious systems (f = 38), patience (f = 25), belief (f = 24), prayer (f = 13), conscience (f = 12) and fate (f = 11). The views of psychological counsellors working with individuals experiencing traumatic grief on specific procedures are given below.

Statements of the participants regarding the category of using religious concepts: *'In traumatic grief, I think one should pray first. Whatever I say in the early days has no effect. They are in a constant dilemma. Why me? Why is that? Will it come back? That is why it is necessary to approach from a religious point of view at first' (P9: E). 'There is a power other than us, we cannot decide, we cannot control it, I think it is very correct to use religious systems at that moment' (P8: C). 'It is necessary to act according to the dynamics of the people according to the event. For example, religion is very important in the mourning process. In other words, whether you are a Christian, a Muslim, or a Jew, I believe that a belief should step in there' (P8: F).*

The statements of the participant regarding the category of giving it time: *"If the child does not open up, you definitely had a trauma, let's work with you, I do not go to that aspect, I give the situation time and wait" (P5: F).*

The statements of the participant regarding the trauma and crisis intervention roadmap category: *'I had a lesson called post-traumatic intervention when I was in college; I always remembered that procedure, so I definitely try to apply that procedure. How did the child learn about the incident? Then I ask some questions without much intervention. What happened then; I want him to talk about the funeral process and then the burials. Then what happened, what did you think, what did you feel, what happened? All the questions come up like this. What is the event, what do you think, what do you feel? What do you do? You see that the violence decreases and the stress symptoms shown after the trauma are not seen after 1 week or after 2 weeks' (P5: F).*

Data and regarding how psychological counsellors feel and think about themselves while working with individuals experiencing traumatic mourning were coded, collected under certain themes and sub-themes, and are presented in Figure 5.

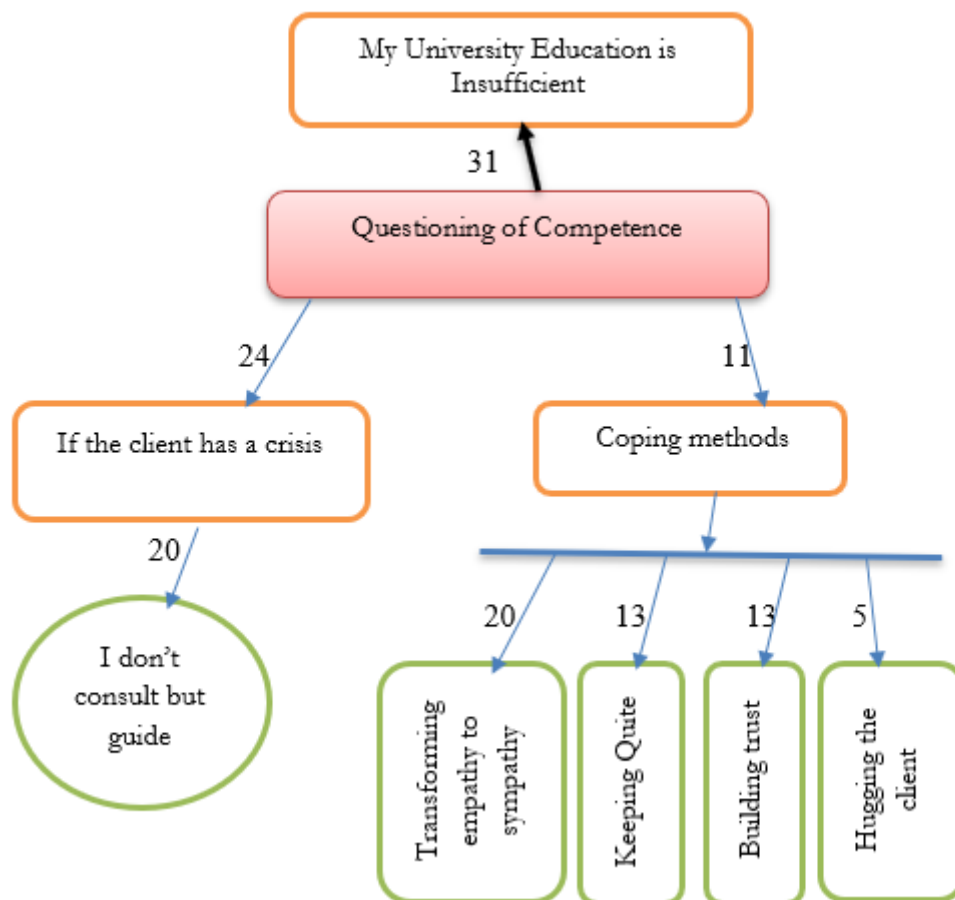


Figure 5. Questioning of competence

As seen in Figure 5, the psychological counsellors' feelings and thoughts about their competencies when working with high school students experiencing traumatic mourning; Firstly, "the education I received at university is not enough for me to conduct a consultation process with these cases" (f = 31). Secondly, "even if I start the consultation process, I do not know what to do if the client has a crisis" (f = 24). "If the client has a crisis, I do not consult, but guide" (f = 20). "I developed coping methods in order not to cause further harm to the client with traumatic mourning" (f = 11). "These coping methods are seen to be transforming empathy into sympathy" (f = 20), building trust (f = 13), keeping quiet (f = 13), and hugging the client (f = 5). Below are examples of the views of psychological counsellors who work with individuals who experience traumatic mourning regarding their feelings and thoughts about their competencies.

Statements of the participants regarding the coping method category. *As my teacher X said, we sometimes confuse empathy and sympathy. If there is a similar situation that we experience directly, we also involve ourselves. Actually, it is the most difficult thing for us (P2: E). When we include ourselves in the work when you fall into the same intensity of emotion, you feel as if you are in their shoes and naturally sometimes you have difficulty understanding it. Because you can lose your professional sense sometimes. Not only the client's control but sometimes there may be points where the consultant has lost control.* (P6: E). *'Oh my God, what kind of burden is this? What do I do? What should I do now? I don't have the strength to cope with myself right now, how can I help him? For example, holding a student's hand does not seem unprofessional to me at that moment'* (P8: F).

The statements of the participants regarding the category of if my university education is insufficient and the client gets into crisis: *'My 6th grader came for the first time, for example, and an abuse case came to me. What to do? For example, my hands were intertwined there. Because my undergraduate education is not enough to intervene in this case. But when I want to intervene, I do not consult but guide "(P10: M).*

When a field worker who has just started the profession encounters a similar case, the data related to the question of what kind of suggestions you would have both professionally and personally as a psychological counsellor were made, collected under certain themes and sub-themes, which are presented in Figure 6.

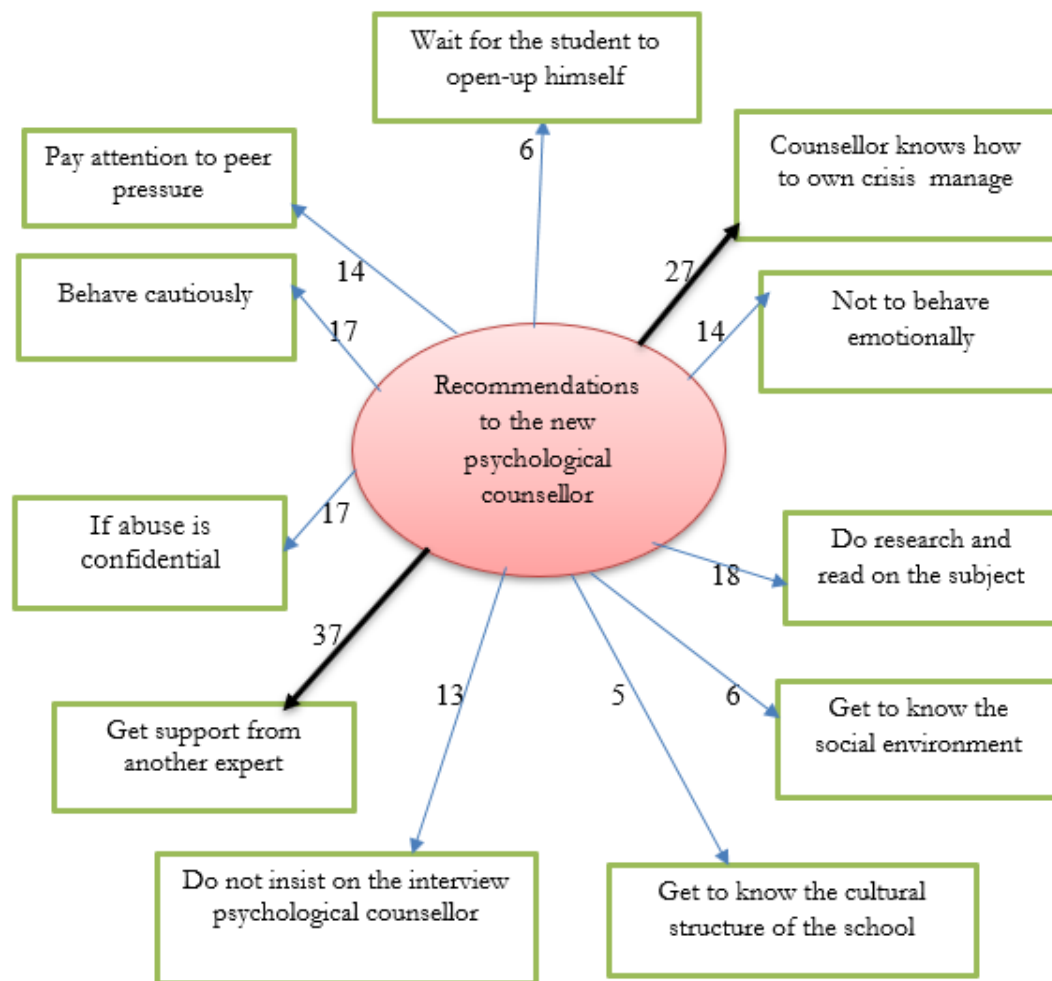


Figure 6. Recommendations to the new psychological counsellor

As seen in Figure 6, when a new field worker encounters a similar case, as a psychological counsellor, get support from another expert ($f = 37$) for the question of what kind of suggestions you would have both professionally and personally; $= 27$), do research and read on the subject ($f = 18$), behave cautiously ($f = 17$), if abuse is confidential ($f = 17$), not emotional ($f = 14$), pay attention to peer pressure ($f = 14$), do not insist on the interview ($f = 13$), wait for the student to open himself ($f = 6$), get to know the social environment ($f = 6$) and get to know the cultural structure of the school ($f = 5$). Below, an example is given of the psychological counsellor's views on both professional and personal recommendations when a field worker who has just started the profession encounters a similar case.

Statements of the participants regarding the “Let another expert handle it” category: *A newly appointed person should definitely consult someone before intervening in the first traumatic event, and then start the intervention after consulting university professors with experienced and hypothetical psychologists who have worked on this issue. Because when you encounter the case for the first time, you panic, you don't know what to do and how to intervene* (P5: P).

The statements of the participants regarding the confidentiality category in case of abuse: *Information should be kept confidential during both the investigation and prosecution phase, especially in cases of abuse and negligence. It should be known that the trauma of disclosing the child's identity in the reflection of such events in the press will last a lifetime. So great sensitivity should be shown at this point* (P4: F). *A psychological counsellor should know the characteristics of the region where the child will be interviewed, the characteristics of the school, language, cultural characteristics very well* (P5: F)

Statements of the participants regarding the “should be cautious” category: *I don't think they should jump into the event immediately. I will take care of it, I will solve the job, I do this job, if he gets in the mood, he will snap out of it. Wait for a little, then wait for the person to open himself. Besides, he has difficulty when he gets in the mood of “I will handle this”. He needs to be cautious* (P9: M).

Encoding of the data regarding the peer briefing of experiences and what questions should be asked scenario was grouped under themes and sub-themes and are presented in Figure 7.

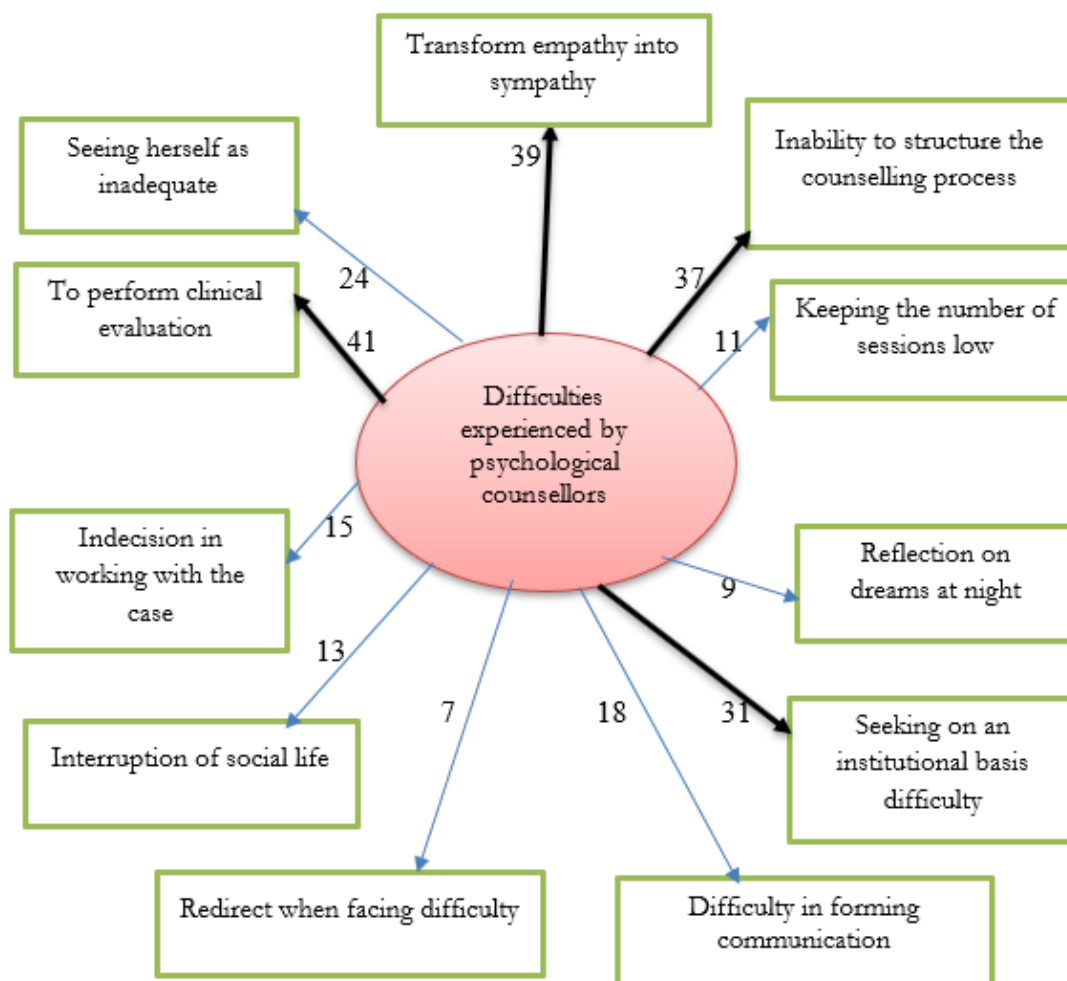


Figure 7. Difficulties experienced by psychological counsellors

If you wanted to present your experiences in Figure 7 to other school psychological counsellors as a briefing; and in this briefing what questions do you think should be asked. While answering this question, it was noticed that the psychological counsellors mostly asked about the difficulties they encountered while conducting the counselling process. Therefore, the top theme was determined as the difficulties experienced by the psychological counsellor. These difficulties are inability to perform clinical evaluation (f = 41), transform empathy into sympathy (f = 39), inability to structure the counselling process (f = 37), seeking an institutional basis (f = 31), seeing herself inadequate (f = 24), difficulty in communicating (f = 18), indecision in working with the case (f = 15), interruption of social life (f = 13), keeping the number of sessions low (f = 11) and reflection on night dreams (f = 9). If you asked to present your experiences in the form of a briefing to the school counsellors; examples of views on what questions should be asked to you in this briefing is given.

Statements of the participants in the category of reflection on night dreams: *How are you affected by what you hear or are you affected at all? Or how do you continue your life? Does everything continue as before? Or is what you experience during the day reflected in your dreams of when you go to bed at night? If it is reflected in your dreams, how do you deal with it? "(P1: F).*

Statements of the participants regarding the category of keeping the number of sessions low: *How many sessions can you have when working with such a difficult case? Because while I am counselling, I cannot organize too many sessions because the client is difficult and resistant "(K11: F).*

Could you tell the school counsellors an anecdote that strikes you when you consider your traumatic mourning experience? The data regarding this question are presented below:

"My student lost his father and mother when he was in primary school. I helped him a lot, but the constant negative thoughts are always anxious and saddening. He did not have any self-confidence and, in the slightest negativity, directly blamed the Divine Will. He says "you do all kinds of injustice to me", I mean, he does not take any refuge in fate here. On the contrary, when one says fate, it almost even comes to a situation where he will swear "(P7: M).

"When a student of mine who was sexually abused expressed a form, I understood the situation. I was amazed that there was a family relationship and the individual desired to explain it. I'm really still trembling when I explain this situation. He told me that his uncle had done some things to him and that he wanted it to be known that he could no longer bear it because of this situation, and then he brought the pictures of his uncle to me. Of course, he cried, naturally, I had experienced such a thing for the first time. This is the first time I've seen such a trauma. I listened, more carefully. Of course, I was lacking, I was not enough. Later, I contacted the Provincial Directorate of Family and Social Policies. One month later, we were still lacking, we couldn't do it. I established sympathy instead of empathy and cancelled the official situation "(P6: F).

'Seven years ago I lost my cousin. One night, a bus hit him in Istanbul, and he died after a few days in intensive care. Seven years have passed, but my aunt still hasn't normalized. She still doesn't smile. When she sees me she surely cries because; she used to say I looked after him as a son. My aunt is a devout person. For example, my mother and everyone around her says; 'Why are you still rebelling?' I'm thinking, why? She does not have a good relationship with her husband; a woman who has been wronged by her husband does not feel strong in that sense. Her childhood was already very difficult. After her marriage, she was also subjected to great oppression and violence from her husband. Now, how can this woman cope with this trauma, although she is older than her husband, she still cannot normalize '(P8: F).

DISCUSSION, CONCLUSION & SUGGESTIONS

The aim of this study is to examine the experiences of school psychological counsellors working with high school students experiencing traumatic mourning, using the focus group interview method. Within the scope of the research, various questions were asked to the school counsellors about the ways in which the clients reached them. The first of these questions is in what ways do high school students who experience traumatic mourning access a psychological counsellor? Results of the trauma of high school students to psychological counsellors showed that they have reached through student identification slips, notifications of classroom teachers, determination of class risk maps, application by themselves, the guidance of their parents, and through the school administration. In the study conducted by Atici (2008), it was determined that the way high school students applied to a psychological counsellor was to go by themselves, the counsellor to come and help, or the teacher to send them. Although these methods of access do not support the research in terms of ranking, it is in line with the content of the subject and the information obtained in the research. It is important to provide support in the school environment, which is where the adolescent with a loss spends most of their time, apart from his / her family. Schools should have a pre-planned crisis response action plan, and a part of this plan should address loss and cope with loss. Moreover, it is important for school administrators, teachers, family and school psychological counsellors in both cases of loss, for a referral to experts of individuals who have suffered a loss (Dogan & Erdur, 2014).

Considering the findings of field workers' identification of the symptoms of individuals experiencing traumatic grief, it is seen that the themes are, inability to dream, an increased sense of guilt, academic failure, substance abuse, a depressed state, increased procrastination, anger control disorders and a lack of self-confidence. Sub-themes are feelings of guilt, self-blame and blaming the Creator, academic failure, lack of motivation, absence from school, hopelessness about the future, physical and emotional depressions, and a lack of self-confidence, which is defined as social withdrawal and difficulty in self-expression. Studies show that adolescents with traumatic losses have increased feelings of anxiety, anger, and guilt (Erdur-Baker, 2007; Atici, 2009; Volkan, 2010; Dyregrov, 2012). These data are parallel to the finding that individuals with traumatic mourning have an increased sense of guilt and experience anger control disorders. On the other hand, substance abuse, hopelessness and desperation, difficulty in concentrating, physical depression, academic failure, dissociative experiences, social withdrawal (Cesur, 2012; Heath et al., 2008; Avci, 2019), and a lack of self-confidence (James and Friedman, 2009), are all similar to the findings of the study. In the early days after the loss, problems with the school may continue while emotional and physical reactions diminish because the decline in academic failure continues as a vicious cycle and negatively affects the academic life of the adolescent in later periods.

When the views of the psychological counsellors on the ways of working with individuals experiencing traumatic grief are examined, it is seen that one-to-one work, referral, cooperative work and working with family are the prominent methods. On the other hand, in the one-on-one method, it is seen that the most difficult area for Psychological Counsellors is the traumatic losses caused by human hands, that is, sexual abuse, re-mourning the case, the resistance shown by the client during the counselling phase, and flashbacks, which defines the experience and feeling of the trauma event. In the study of Tuzgöl Dost and Keklik (2012), the areas where field workers have the most difficulties are psychological counselling, trauma and crisis intervention, and clinical/special cases (adolescence, anger, suicide, abuse, death, incest, etc.). These findings are in line with the findings of the current study. Other difficulties faced by field

workers are cases of sexual abuse, re-mourning, resistance or absence of the client during the counselling phase, and flashbacks, which defines re-experiencing and feeling the trauma event. The easiest situation mentioned by field workers is to refer to clients. Although referring an individual with traumatic mourning seems to be the easiest subject for school psychological counsellors, it can be said that the case has actually made it obligatory for the employee to turn to this. Other forms of work appear to be collaborative and family work. This finding is similar to the one found by Tuzgöl Dost and Keklik (2012). Similarly, it is observed that field workers working with losses have difficulty in analyzing the resistance they encounter. Egan (2011) found that the psychological counsellor who is faced with resistance has to take control of his / her emotional reactions. It is stated that it would not be wise to become angry with a resisting client, to exhibit aggressive behaviour, and to wait for the resistance to resolve on its own. Psychodynamic therapists invite the client to be curious about resilience because a thorough study of the things that hinder therapy sheds light on wishes, phantasies, conflicts and desires. In this case, the non-insistence of the psychological counsellor who encounters resistance may be useful in analyzing the resistance (Gabbard, 2011). Another challenge is re-justification. This method considers it appropriate to focus on lost relationships, memories about the deceased, and reactions to the moment of death, rather than focusing on the reactions of concrete loss or largely ignoring the general psychological existence of the person (Volkan, 1992). For this reason, it can be said that the psychological counsellor should carefully choose the subject on which he will focus during re-justification.

What is striking in the finding of the special procedures of psychological counsellors when working with individuals who experience traumatic mourning, is that the field workers keep religious concepts at the forefront. A significant number of field workers state that they use religious systems, patience, belief, prayer, conscience, fate, and religious concepts that constitute the content of the accident as effective methods when working with adolescents experiencing traumatic mourning. In a study by Webb (2007), it was found that especially adolescents who think that a loved one "watches" them after their loss, perceive this as being watched over by a being who protects and loves them and is relieved. Similarly, Humphrey (2017) appears that the bereaved individual uses a spiritual strategy such as praying to focus on the here and now experience, find meaning and facilitate emotional expression. This situation supports the findings in the study. However, in the study by Martin and Doka (2000), it is stated that an untimely loss can be interpreted as the Will of God and provides relief, but later it may be the source of grief and fragility. This finding contrasts with the findings in the study. On the other hand, it is seen that psychological counsellors use religious concepts (accident, fate, belief, patience, religious systems, conscience, and prayer) when working with adolescents experiencing traumatic mourning, trying to comfort the client or to convey the values that exist in their own culture. However, transferring values in the counselling process are considered an ethical violation. Adolescents who can obtain support from school and peer groups during the mourning process can overcome this process more easily (Carter, 2016). This situation is seen to be similar to the method of providing social support, which is another finding of the study.

What Psychological Counsellors feel and think about their competencies when working with high school students who experience traumatic mourning are; firstly, "the education I received at university is not enough for me to conduct a consultation process with these cases". Secondly, "even if I start the consultation process, I don't know what to do if the client has a crisis. If the client has a crisis, I will be a guide, not a counsellor. On the other hand, while I intervene with the client with traumatic mourning, I develop coping methods in order to not harm him more". It seems that these coping methods are

transforming empathy into sympathy, building trust, keeping quiet, and hugging the client. What is striking in these results is that the field workers stated that their university education was insufficient to conduct a consultation process with adolescents with traumatic mourning. This result shows that there is a serious gap in theory and practice in psychological counselling and guidance undergraduate education. According to Dogan and Erkan (2001), the reason why psychological counselling and guidance services could not be provided at a sufficient level is due to the fact that in the past, existing undergraduate programs aimed at training psychological counsellors differ in terms of the number of courses, variety, number and quality of lecturers. Similarly, Paisley and Borders (1995) state that counsellors may encounter different student problems in schools and especially in clinical cases, they need supervised training where they can get support. The existence of the above findings, which supports the fact that psychological counsellors do not consider themselves competent in the counselling process, shows how important the issue is. In particular, the counsellors express their concerns as if the client has a crisis, what will they do if the client cries. In order to cope with all these issues, it is seen that they use the methods of hugging the client, turning empathy into sympathy, and providing guidance rather than counselling and staying silent in the face of the case. In the study conducted by Aydemir Sevim and Hamamci (1999), it was determined that psychological counsellors were able to regulate the informative function of counselling, but they felt competent at a moderate level in the counselling part. This finding supports current research.

Another result obtained in this study was recommendations to a psychological counsellor who has just started the profession. In this context, the recommendation that a psychological counsellor who has just started the profession should seek support from another specialist when faced with a traumatic mourning case is the most emphasized suggestion. Other suggestions, in order include; ask the advisor know how to manage his / her own crisis first, do research and read about the subject, behave cautiously, if there is abuse, pay attention to confidentiality, do not be emotional, pay attention to peer pressure, do not insist on interviews, wait for the student to open upon his / her own, get to know the social environment, and get to know the cultural structure of the school expressed. Atici (2008), Kaya and Yildirim (2017) consider it important that psychological counsellors who encounter similar cases have knowledge and skills on the subject. This finding is in line with the findings in the study. On the other hand, Fonseca (2008), in his study about the counsellor's management of his own crisis, attributes the psychological counsellor solving or overcoming his own crisis, more to professional experience. Considering that the longer the psychological counsellors have worked in the field, the higher the number of cases they will encounter; it can be said that they have gained an advantage in evaluating the crisis situation. Although experience is important for the psychological counsellor to overcome his own crisis, training in traumatic mourning and supervision are required.

If you wanted to present your experiences to the school psychological counsellors as a briefing, it is seen that the questions are mostly clustered on the difficulties experienced by the psychological counsellor, when looking at the findings of which questions to ask you in this briefing. One of the main difficulties experienced by school counsellors is clinical evaluation. The issues that psychological counsellors do not consider themselves sufficient when making clinical evaluations are the unknown psychological assessment tools, and on the other hand, their inability to use their psychological counselling skills. It is stated that there are difficulties such as not knowing which questions to ask, difficulty in asking questions to clarify the client's situation, fear of losing focus or asking too many questions one after another (Aladag, Yaka, & Koc, 2014). However, psychological counsellors who conduct clinical evaluations (by interview

or via a psychological test application method) should be able to ask questions skillfully in order to make a good evaluation about the client, in addition to active listening in counselling sessions. Other findings are that the counsellor turns empathy into sympathy, cannot structure the counselling process, has difficulty in communicating with the client, and their social life is interrupted because of the counselling process, who then reduces the number of sessions and thus tries to prevent the difficult process from reflecting on night dreams.

Based on these findings, suggestions made within the framework of the results achieved are as follows:

1. It is thought that it would be beneficial to organize in-service training for psychological counsellors of the Ministry of National Education on how to intervene more effectively in individuals with traumatic mourning.
2. According to the findings of the research, it is seen that psychological counsellors working with individuals with traumatic mourning have the most difficulty in one-to-one work. For this reason, it may be recommended to teach a compulsory course on "working with traumatic mourning" in the psychological counsellor training.
3. Psychological counsellors working with individuals with traumatic mourning felt more inadequate about themselves. In order to manage this situation in a healthy way, supervision support can be provided to field employees in cooperation with the Ministry of National Education and universities.
4. One of the difficulties experienced by psychological counsellors in the research findings is that they cannot perform clinical evaluations about adolescents experiencing traumatic mourning. For this reason, it can be included in both undergraduate education and in-service training of the Ministry of National Education regarding the way and process of clinical evaluation in trauma and grief or traumatic mourning.
5. The research findings show that the difficulties that psychological counsellors encounter while working with an adolescent with traumatic mourning are at the forefront. In this direction, it can be said that the difficulties faced by the psychological counsellors working in the field, and the needs analysis for them, will shed light on both making undergraduate education qualified, and the in-service training activities of the Ministry of National Education more active.
6. It is a limitation that the qualitative and sampling of this study is only for Bingöl. Therefore, it is suggested that other researchers can conduct similar quantitative studies in other provinces.

REFERENCES

- Aladağ, M., Koç, İ., & Yaka, B. (2014). Opinions of counsellor candidates on counselling skills training. *Educational Sciences: Theory & Practice*, 14 (3), 859-886.
- Amplitude, Ö (2012). The mourning process and the examination of the depression and anxiety levels of people in the mourning process, Master's thesis, Istanbul Arel University, Istanbul
- Avcı, M. & Gulbahce, A. (2019). Investigation of high school students' interpersonal problem solving skills according to their sociometric status. *Journal of Social and Humanities Sciences Research*, 6 (48), 4598-4610.
- Avcı, M. (2019). Dissociative Experiences and Examination of Psychological Symptoms of Individuals in Grief Process, *The Journal of Social Science Journal*, 3 (6): 565 – 582
- Aydemir Sevim, S., & Hamamcı, Z. (1999). Examining the relationship between the professional satisfaction and professional competencies of psychological counsellors. *Turkish Psychological Counselling and Guidance Journal*, 2 (12), 39-46.
- Barlé, N., Wortman, C. B., & Latack, J. A. (2017). Traumatic bereavement: Basic research and clinical implications. *Journal of Psychotherapy Integration*, 27 (2), 127.
- Bas, T., Camir, M., & Ozmalidar, B. (2013). Focus Group Study. T. Bas and U. Akturan (Ed.) *Qualitative Research Methods*, Ankara: Seçkin Publishing
- Berksun, O.E. (1995). Loss, mourning, death with psychosocial and medical aspects. *Crisis Magazine*, 3 (1-2), 68-9.
- Bildik, T. (2013). Death, loss, mourning and pathological mourning. *Aegean Medical Journal*, 52 (4).
- Boelen, P. A., & Prigerson, H. G. (2007). The influence of symptoms of prolonged mourning disorder, depression, and anxiety on quality of life among bereaved adults. *European Archives of Psychiatry and Clinical Neuroscience*, 257 (8), 444-452.
- Boelen, P. A., Reijntjes, A., & Smid, G. E. (2016). Concurrent and prospective associations of intolerance of uncertainty with symptoms of prolonged grief, posttraumatic stress, and depression after bereavement. *Journal of Anxiety Disorders*, 41, 65-72.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *American psychologist*, 59 (1), 20.
- Carter, M. (2016). Helping children and adolescents think about death, dying and mourning. *Jessica Kingsley Publishers: London*
- Celik, S., & Sayıl, I. (2011). A New Approach to the Concept of Pathological Mourning: Traumatic Mourning. *Crisis Magazine*, 11 (2), 29-34.
- Cesur, G. (2012). Psychosocial determinants of traumatic mourning and post-traumatic growth in adults, master thesis, Hacettepe University, Ankara
- Children's Bereavement Center of South Texas. (2008). 2008 Report to our community, retrieved from <http://www.cbcst.org>. Accessed from.
- Creswell, J.W. (2016). *Qualitative Research Methods (Qualitative Research and Research Pattern According to Five Approaches)*, (Trans. Ed. M. Bütün ve S.B. Demir). Ankara, Political Bookstore.
- Di Ciacco, J. (2008). The colors of grief: Understanding a child's journey through loss from birth to adulthood. *Jessica Kingsley Publishers*.
- Dogan, S. (2001). How Can Psychological Counselling and Guidance Services Be Structured in Schools? VI. National Psychological Counselling and Guidance Congress. Ankara: *METU Faculty of Education*.
- Dogan, S., & Erkan, S. (2001). Counsellor Training in Turkey Profile: Current Situation, Problems and Solutions. VI. National Psychological Counselling and Guidance Congress. Ankara: *METU Faculty of Education*.
- Dogan, T. and Erdur, Ö. (2014). Disasters, Traumas, Crises and Traumatic Stress Reactions. In Türkan Dogan and Özgür Erdur (Eds.), *Disasters, Crises, Traumas and Psychological Aid* (pp. 3-24). *Turkish PDR Association Publications*, Ankara.
- Dost, M. T., & Keklik, İ. (2012). Problems of psychological counselling and guidance field from the perspective of professionals in the field Mehmet Akif Ersoy University Journal of Education Faculty, 1 (23), 389-407.

- Duman, N. S. (2014). Cancer, Death Concept and Grief in Children. *Acta Oncologica Turcica*, 47 (2), 26-30.
- Dyregrov, A., & Dyregrov, K. (2012). Complicated grief in children. In M. Stroebe, H. Schut, J. van den Bout, & P. Boelen (Eds.). *Complicated mourning: Scientific foundations for health care professionals*. (pp. 68-81). London, UK: Routledge
- Egan, G. (2011). *Counselling skills*. (Ö. Yüksel, Trans.). Kaknus Publications. Istanbul
- Ercan, L. (2001). Guidance and psychological counselling services during adolescence. *Kastamonu Education Journal*, 9 (2), 47-58
- Erden, G. (2002). Child in the dying process: effective assistance in the process of acceptance and treatment. *Crisis magazine*, 10 (1), 19-27.
- Erdur-Baker, Ö. (2007). Psychological counselling and cultural factors. *Turkish Psychological Counselling and Guidance Journal*, 3 (27), 109-122.
- Fonseca, T. A. (2008). Professional school counsellor perception of preparedness in stabilizing a student in specific crisis situations: A random sample of American School Counsellor Association members. Unpublished Doctoral Dissertation, The Faculty of Mississippi State University.
- Gabbard, G.O. (2011) *Long-Term Psychodynamic Psychotherapy: A Basic Text*, American psychiatric Publishing
- Heath, M. A., Leavy, D., Hansen, K., Ryan, K., Lawrence, L. & Gerritsen Sonntag, A. (2008). Coping with grief: Guidelines and resources for assisting children. *Intervention in school and clinic*, 43 (5), 259-269.
- Humphrey, M. K. (2017). *Counselling skills for loss and grief* (F. Tanhan, Çev). Ankara: Nobel Publishing.
- James, J. W., Friedman, R., & Matthews, L. L. (2001). *When children grieve: For adults to help children deal with death, divorce, pet loss, moving, and other losses*. Harper Collins.
- Kaner, S., Bayraklı, H., & Güzeller, C. O. (2011). Investigation of parents' perception of resilience in terms of some variables. *Ankara University Faculty of Educational Sciences Special Education Journal*, 12 (02), 63-83.
- Kaplow, J. B., Howell, K. H., & Layne, C. M. (2014). Do circumstances of the death matter? Identifying socioenvironmental risks for mourning - related psychopathology in bereaved youth. *Journal of Traumatic Stress*, 27 (1), 42-49.
- Karabulut, E. (2010). Experiencing the acute period of mourning in condolence houses in Diyarbakır and determining the factors affecting the severity of grief Mental health and diseases specialty thesis, Dicle University, Diyarbakır.
- Karaca, S. (2012). The Delayed Farewell: A Case Report. *Journal of Psychiatric Nursing*, 3 (3), 136-140.
- Karakus, G., Ozturk, Z., & OK, L. (2012). Death and death anxiety. **Archives Medical Review Journal**, 21 (1) .120-122
- Karpat, D. (2011). Examination of grief reactions, marital adjustment and social support perceptions of parents of children diagnosed with pervasive developmental disorder, Master's thesis, Dokuz Eylül University, İzmir
- Kaya, M., & Yıldırım, (2017). The perceptions of high school psychological counsellors about crisis situations in schools. *Journal of Humanities and Social Sciences*, 6 (2), 835-857.
- Kaya, M., Yıldırım, T., & Atli, A. (2018). Developmental Problem Areas Scale: Validity and Reliability Study. *Mehmet Akif Ersoy University Journal of Education Faculty*, (45), 48-73.
- Kıvılcım, M., & Dogan, D. G. (2014). Child and death. *Turgut Özal Medical Center Journal*, 21 (1).
- Malkinson, R. (2009). *Cognitive Grief Therapy*. (Trans. S. K. AkBas), Hyb Publishing, Ankara
- Mallon, B. (2008). *Dying, death and grief: Working with adult bereavement*. Sage.
- Mannarino, A. P., & Cohen, J. A. (2011). Traumatic loss in children and adolescents. *Journal of Child & Adolescent Trauma*, 4 (1), 22-33.
- Martin T. and Doka K.J. (2000). *Men don't cry, women do: Transcending gender stereotypes of grief*. Philadelphia, PA: Brunner Mazel
- Morgan, D. L. (2002). Focus group interviewing. *Handbook of interview research: Context and method*, 141-159.
- Okyavuz, Ü. (1995). Death and terminal illness. *Ankara University Psychiatric Crisis Application and Research Center, Crisis Journal*, 3 (1), 167-171.

- Ozguven, H. D. (1999). The frequency of erroneous automatic thoughts and dysfunctional attitudes in psychiatric crisis cases. *Crisis Magazine*, 7 (2), 9-16.
- Ozturk, Z. Karakus, G. & OK, L. (2011). Death anxiety in elderly people. *Anatolian Journal of Psychiatry*, 12 (1), 37-43.
- Paisley, P. O., & Borders, L. D. (1995). School counselling: An evolving specialty. *Journal of Counselling & Development*, 74 (2), 150-153.
- Patton, M. Q. (2014). *Qualitative research and evaluation methods: Integrating theory and practice*. Sage publications.
- Pinar, Ç. N. (2013) Relationship between mourning process and attachment styles in patients treated for complicated mourning: follow-up study, specialty in medicine thesis, Bakırköy Region Istanbul Province Public Hospitals Association General Secretariat Bakırköy Prof. Dr. Mazhar Osman Mental Health and Neurological Diseases Training and Research Hospital Psychiatry Clinic, Istanbul
- Powell R A, Single H M and Lloyd K. (1996) Focus groups and mental health research: enhancing the validity of existing questionnaires. *Int J Soc Psychiat*. 42: 193-206.
- Prigerson H.G. and others (2009). Prolonged mourning disorder: psychometric validation of criteria proposed for DSM-V and ICD-11. 6 (8)
- Psychological Counselling and Guidance Association (2017). Draft Mental Health Law, Access Date: December 20, 2020, [https:// www. pdr.org.tr](https://www.pdr.org.tr)
- Rosner R, Pfoh G, Kotoučová M, Hagl M. (2014) Efficacy of an outpatient treatment for prolonged mourning disorder: a randomized controlled clinical trial. *J Affect Disord*. 167: 56--63.
- Şenelmiş, H. (2006). A study on mourning cases applying to Ankara University crisis center. Unpublished master's thesis. Ankara
- Shear, M. K., Simon, N., Wall, M., Zisook, S., Neimeyer, R., Duan, N. & Gorscak, B. (2011). Complicated mourning and related mourning issues for DSM - 5. *Depression and anxiety*, 28 (2), 103-117.
- Shooter, M. (2008). Primary school students' views on the help of the school psychological counsellor in resolving the conflicts they have with their friends. *Educational Administration: Theory and Practice*, 53 (53), 25-47.
- Silverman, D. (2001). *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. London: SAGE Publication.
- Stewart D.W, Shamdasani PN and Rook D.W (2007) *Focus Groups: Theory and Practice*. 2nd edn. Sage Publications, Thousand Oaks
- Taylor, S. (2017). *Clinician's guide to PTSD: A cognitive-behavioral approach*. Guilford Publications.
- Tuba, Ö. O. (1999) Factors determining the mourning process that develops after traumatic losses, Specialization thesis, Istanbul University, Istanbul
- Union, A. P. (2013). *Diagnostic and Statistical Manual of Mental Disorders*, (Trans. Ed. E. Köroğlu, 5th ed.) Hekimler Publishing Union. Ankara
- Volkan, V. D. (2010, June). Culture, international relations and psychoanalysis. In Powerpoint presentation of plenary address to the American Psychoanalytic 99th Annual Meeting, Washington, DC, USA. Retrieved July (Vol.23, p.2011).
- Volkan, V. D., & Zintl, E. (2010). Life After Loss (Trans. Vahip I, Kocadere M). Halime Focus Psychoanalysis and Psychotherapy Foundation Training Notes, (1), 14-24
- Volkan, V.D. (1992) Psychoanalytical Articles. Çevik A, Ceyhun B (Çev), Ankara, Physicians Publishing Union, p.58-87.
- Webb, N.B. (2007). Sudden death of a parent in a terrorist attack: Crisis intervention conjoint play therapy with a preschool boy and his mother. In N. B. Webb (Ed.), *Play therapy with children in crisis: Individual, group, and family treatment* (pp. 389-407). New York, NY: Guilford.
- Yıldırım, A., & Simsek, H. (2006). *Qualitative research methods in the social sciences*. (2nd Edition). Ankara: Seçkin Publishing.

- Yılmaz, M. (2014). Growth Thgrouh Traumatic Loss: The Effect of Grief Related Factors, Coping and Personality on Posttraumatic Growth. Istanbul Bilgi University publications
- Yin, R. (1984). Case Study Research: Design and Methods. Beverly Hills, Calif: Sage Publications
- Yüksel-Şahin, F. (2008). Evaluation of school counselling and guidance services based on views of high school students. *Journal of Human Sciences*, 5 (2).
- Zara, A. (2011). Losses, Maourning Reactions and Mourning Process. As We Live: Psychological Problems and Ways to Cope, (Ed.). Istanbul: Image Publications, 73-90

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Author Contributions

MA: Idea and design, data collection and analysis, interpretation of findings, reporting of the article.

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Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

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Ethical Statement

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RESEARCH

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ARAŞTIRMA

Açık Erişim

The Witness Experiences of Bullying in High School Students: A Qualitative Study

Lise Öğrencilerinin Zorbalığa Tanıklık Yaşantıları: Nitel Bir Araştırma

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ABSTRACT

Bullying is a common problem in today's schools. Bullying affects not only victims and bullies but also the other students who witness the bullying. The purpose of this research is to examine the behaviors shown by high school students who have witnessed bullying and the processes that have led them to these behaviors. By with this purpose, the research benefits from grounded theory design. In-depth interviews have been performed with 36 people who voluntarily participated in the research. The qualitative findings of the research show the witness experience of bullying to be a complex process. As a result of the research, firstly school counselors need to do awareness studies on bullying. Because it is seen that students' definitions of bullying are limited to physical bullying. Secondly, situational conditions seem to change the behavior of individuals who witness bullying. Therefore studies will need to be done directed at school administrators', teachers', and school psychologists' development of positive class climates and formation of anti-bullying norms, as well as at increasing peer relations. Thirdly, this study has demonstrated the importance of cognitive empathy. Cognitive empathy should be added to anti-bullying programs. Research has shown that bullying should be handled as a system that includes teachers, victims, bullies, witnesses, and parents.

Article Information

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ÖZET

Zorbalık, günümüz okullarında yaygın bir sorundur. Zorbalık sadece zorbalı ve mağdurları değil, aynı zamanda zorbalığa tanık olan diğer öğrencileri de etkiler. Bu araştırmanın amacı, zorbalığa tanık olan lise öğrencilerinin gösterdiği davranışları ve onları bu davranışlara yönlendiren süreçleri incelemektir. Bu amaç doğrultusunda araştırmada, gömülü teori tasarımından yararlanılmıştır. Araştırmaya gönüllü olarak katılan 36 kişi ile derinlemesine görüşmeler yapılmıştır. Araştırmanın nitel bulguları, tanıklık deneyiminin karmaşık bir süreç olduğunu göstermektedir. Araştırma sonucunda ilk olarak okul danışmanlarının zorbalık konusunda farkındalık çalışmaları yapmaları gerektiği görülmektedir. Çünkü öğrencilerin zorbalık tanımlarının fiziksel zorbalıkla sınırlı olduğu görülmektedir. İkinci olarak, durumsal koşullar zorbalığa tanık olan bireylerin davranışlarını değiştiriyor gibi görünmektedir. Bu nedenle, okul yöneticilerinin, öğretmenlerin ve okul psikologlarının olumlu sınıf ortamlarını geliştirmelerine ve zorbalık karşıtı normların oluşumuna ve ayrıca akran ilişkilerini artırmaya yönelik çalışmaların yapılması gerekecektir. Üçüncü olarak, bu çalışma bilişsel empatinin önemini ortaya koymuştur. Zorbalıkla mücadele programlarına bilişsel empati eklenmelidir. Araştırmalar, zorbalığın öğretmenleri, mağdurları, zorbalı ve tanıkları ve ebeveynleri içeren bir sistem olarak ele alınması gerektiğini göstermiştir.

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INTRODUCTION

Bullying is the ongoing actions of a stronger person or persons toward a weaker person or persons that are repeated over time with negative consequences (Çinkır & Karaman-Kepenekçi, 2003; Olweus, 1994; Pişkin, 2002; Rigby, 2007). Moreover, bullying is seen to be more complex when examining the events, victims, bullies, and witnesses. Discussing bullying individually has misled researchers (Olweus, 2001; Perdew, 2015). Bullying does not just take place between the bully and the victim; it also affects those who witness it (Pozzoli, 2010; White, Hammonds, & Valkyrie, 2014) and at the same time is also affected by the witnesses (Rigby, 2003; Salmivalli, 1999).

In the case of bullying, witnesses can be seen able to exhibit behaviors in various ways, such as watching (Coloroso, 2011); getting away from the environment (Craig, Pepler, & Atlas, 2000; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996); doing nothing (Tapper & Boulton, 2005); belittling the victim, admiring the bully, actively encouraging the bully, and joining the bully (Rigby & Slee, 1991); laughing (Tapper & Boulton, 2005); helping the victim (Rigby & Slee, 1991); actively confronting the bully, talking with the bully, defending the victim, and talking with the victim (Coloroso, 2011); comforting the victim, informing an adult, and trying to resolve the situation (Tapper & Boulton, 2005); and consoling the victim (Salmivalli et al., 1996; Tapper & Boulton, 2005). So, bullying incidents include students who have different roles (González-Cabrera et al. 2020).

In the case of witnessing bullying, various studies have examined the reasons for changes in people's behaviors. As a result of qualitative and quantitative research, demotivating factors on the issue of helping the victim have emerged as a lack of self-confidence (Lodge & Frydenberg, 2005); fear of the bully taking revenge (Coloroso, 2005, 2011; Rigby, 2007), making the situation worse (Coloroso, 2005, 2011), and losing status (Coloroso, 2005; Forsberg et al., 2016); not knowing how to intervene (Coloroso, 2005; Lodge & Frydenberg, 2005); low empathy (Demaray, Summers, Jenkins, & Becker, 2016; Pozzoli, Gini, & Thornberg, 2017); not feeling responsible (Tornberg et al., 2012); thinking it does not concern them (Coloroso, 2005; Rigby & Johnson, 2005); thinking that helpful behaviors will not be beneficial and drawing pleasure from the sight (Rigby & Johnson, 2005); not interpreting the bullying situation as damaging and being used to bullying (Forsberg et al., 2016; Tornberg et al., 2012); being friends with the bully, hating the victim, and believing the bully (Tornberg et al., 2012); blaming the victim, not being friends with the victim (Forsberg et al., 2016; Tornberg et al., 2012); low self-efficacy on the issue of intervention (Tornberg et al., 2012; Thornberg, Wänströma, Hong, & Espelage, 2017); the victim being confident (Sokol, Bussey, & Rapee, 2015); performing verbal and relational bullying (Tapper & Boulton, 2005); uncertainties about the situation and intervention (Coloroso, 2005; Craig, Pepler, & Atlas, 2000; Oh & Hazler, 2009); not knowing the bully or the victim (Lodge & Frydenberg, 2005); and believing teachers and peers will not show support while intervening (Forsberg et al., 2016). However, victims try to seek support primarily from peers (Hamby, Weber, Grych, & Banyard, 2015; Rigby & Johnson, 2006).

When investigating supporting the victim, girls are found more than boys to exhibit attitudes that defend (Lamb, Hudson, Craig, & Pepler, 2017; Pozzoli, 2010) and support (Jenkins & Fredrick, 2017; Thornberg & Jungert, 2013) the victim. Additionally, findings have been obtained on behaviors supporting the victim related to high social self-efficacy (Gini et al., 2008; Rigby & Johnson, 2005, 2006); feeling responsible (Jenkins & Nickerson, 2017; Pozzoli & Gini, 2010, 2013); the victim being a friend (Rigby & Johnson, 2005; Tornberg et al., 2012; Thornberg, Landgren, & Wiman, 2018); the expectations of parents and teachers on the issue of helping victims (Rigby & Johnson, 2005; Rigby & Johnson, 2006); the desire to

gain adults' approval, thinking to draw the bully's attention when helping (Ross, Lund, Sabey, & Charlton, 2017); group norms on the issue of helping peers (Pozzoli & Gini, 2010, 2013; Pozzoli, Gini, & Vieno, 2012); knowing how to intervene (Jenkins & Nickerson, 2017; Rigby & Johnson, 2005); perceiving the bully as hurtful (Forsberg et al., 2016; Tornberg et al., 2012); empathy (Pozzoli, Gini, & Thornberg, 2017; Pöyhönen, Juvonen, & Salmivalli, 2010); believing that bullying is wrong, intervention self-efficacy (Tornberg et al., 2012); having bad relationship with the bully (Song & On, 2018; Thornberg & Jungert, 2013); perceiving support from the teacher and friends (Eliot, Cornell, Gregory, & Fan, 2010; Forsberg et al., 2016; Jenkins & Fredrick, 2017); the victim appearing sad (Sokol, Bussey, & Rapee, 2015); bullying that occurs in the form of physical bullying (Tapper & Boulton, 2005); moral perceptions on protecting (Forsberg et al., 2016; McLaughlin, Arnold, & Boyd, 2005); and perceiving the victim as innocent (Forsberg et al., 2016).

The scope of the literature for those helping the bully shows those who feel supporting the bully to be a safer option (McLaughlin, Arnold, & Boyd, 2005; Rigby & Johnson, 2005), being scared of the bully (Ross et al., 2017), having admiration for the attacker or feelings of hostility like thinking the victim deserves it (Rigby & Johnson, 2005), they also being a bully and having aggressive behaviors (Oh & Hazler, 2009), high moral indifference (Thornberg & Jungert, 2013), and being friends with the bully (McLaughlin, Arnold, & Boyd, 2005; Ross et al., 2017). Additionally, being male increases the likelihood of being involved in the role of supporting the bully (Ergül, 2009; McLaughlin, Arnold, & Boyd, 2005).

Doing a grounded theory design research has been felt necessary for addressing the behaviors of witness in the form of a process, focusing on high school students in the case of bullying. While studies on bully and victim behaviors are available, research performed in Turkey on students in the witness position is seldom observed (Ergül, 2009). This research intends to investigate the process high school students who have witnessed bullying experience in bullying events. High school, where peer relationships have become more important, is an important period in young people's life. The qualitative stage of the research will investigate where the participants do not focus on supporting bullies; due to their descriptions of this behavior more than others. It is thought that people's definitions of bullying are a fundamental factor in whether or not they will interfere with the bullying incidents.

METHOD

Research Model

The qualitative research method was used in this study. In this study, grounded theory, one of the qualitative research methods, was used. A model is felt necessary for portraying, explaining, and interpreting the state of the responses high school-aged children give in the case of bullying, the dynamics that lead them to behave differently, how they go through a decision-making process, and what they experience after their exhibited behavior. Therefore, the grounded theory design has been used, which indicates establishing close relationships among the data for research and producing theoretical ideas from the data (Goulding, 2001; Howitt, 2010).

Participants

Grounded theory is based on theoretical sampling, a type of purposive sampling. In theoretical sampling, the researcher includes participants in the study until reaching theoretical saturation (Starks & Brown Trinidad, 2007). Guidance services have been consulted for choosing students who would be interviewed. Those who were selected as a witness to bullying events were identified as those who had not formed a

perception of the bully or victim in the bullying situation and who had contributed to the bullying process by remaining active or passive. Students with high observation and communication skills were directed to the researcher by guidance services. 36 high school students participated in the research, 21 girls and 15 boys.

Ethical Statement

The study was carried out within the framework of the Helsinki Declaration and all participants whose informed consents were obtained took part in this study as volunteers. Required permits were obtained to use the scales in this study. The participants were informed of the goals of the project and they were told that their identities would be kept confidential.

Data Collection Tools

Semi-structured interviews were carried out for collecting the data of the research. The researcher developed the Witness Experience Interview Form, consisting of open-ended questions. It was initially started with few questions due to the nature of the grounded theory method. Participants were asked if they know what bullying is, to begin with, and if they did not know what bullying is, the researcher defined the term. As the interviews progressed, new questions were added. Besides, short stories containing dilemmas prepared by the researcher were used.

Data Collection and Analysis

The interviews made using the data resources were voice recorded with the participants' permission. The records that were made were brought to a written state. MAXQUDA 12, a qualitative data analysis program, was used for analyzing the interviews.

In grounded theory design, data collection and analysis procedures at the same time (Creswell, 2012; Corbin & Strauss, 1990). Strauss and Corbin's (1998) data analysis process of open, axial, and selective coding has been followed in this research. Besides, the researcher formed memos by noting the observations in schools from the first interview onward. The memos helped map the emerging theory and define concepts (Goulding, 2001).

Validity and Reliability

Persuasiveness is provided in qualitative research through methods such as having a long in-field process, expert confirmation, and intensive descriptions. Transferability is provided through methods like purposive sampling and for confirmability, methods like peer confirmation and performing simultaneous data collection and analysis. Consistency is realized through expert and peer confirmations and archiving the raw data (Creswell, 2013; Hays, Wood, Dahl, & Kirk-Jenkins, 2016). Observations in the research were provided by making in-depth interviews with the participants and spending time at school. Additionally, opinions were received in the data collection, analysis, and interpretation stages from experts who had performed grounded theory research. Dense descriptions and direct quotations have been benefitted from, and how the sample was selected has been explained in detail.

RESULTS

The study has focused on what kind of process high school students who have witnessed bullying situations have gone through, as well as the emergent behavior resulting from witnessing this by starting from the moment they witnessed the event. In the results of the performed analyses, the witness

experiences have been examined under the themes *Witnessing Bullying, Behavior-Directing Principle, Emotional Triggers, The Decision Process, Exhibited Behavior, and Self-Feedback*.

The participants mostly mentioned physical bullying as the most visible, together with being witness to different types of bullying. No matter what kind of bullying the students witnessed, they experienced a process that led them to support the victim, remain unresponsive, or support the bully. Values and emotions first come to the fore in this experience. *Behavior-directing principles*, which contained some basic values like the desire for due justice, were mentioned in the interviewed students' expressions. These values are seen as forming a basic foundation for their behaviors. The participants' basic behavior-directing principles and interpersonal values are based on self-protection and the value of power. Also, certain factors have been found that moved their emotions into action when first encountering the bullying situation. The perception of the victim, bully, and bullying; previous experiences; and conscience form the *emotional triggers*. The victim, bully, and bullying perceptions that took place in the sample participants' minds affected whether or not they took the bullying they witnessed seriously and the behaviors they would perform. When bullying came to be mentioned as physical bullying in the minds of the participants, they were able to intervene by taking the physical bullying they witnessed seriously. Therefore conscience comes into play as a result of this perception. The conscience can act with compassion and sympathy. *Behavior-directing principles* and *emotional triggers* form the targeted behavior in one's mind by being activated together. One student stated, "So that the victimized person does not victimize more people. Because if you do not respond once, it will continue. One day he gets infected with someone else and the next day he gets infected with another person. You will be infected last." about *behavior-directing principles*. Another student explained as *emotional triggers* "If I don't defend, I feel like I'm in trouble"

Following the targeted behavior that forms in one's mind, many factors are found that simplify or complicate turning this goal into action. One enters a decision process by considering the *simplifying* and *complicating* factors. One's decision process affects position monitoring, gains and cost predictions, and belief in the ideal intervention. The decision-making process includes taking a position, such as whether or not one justifies the victim, the victim's gender, having a negative relationship with the victim, proximity to the bully, and the strength of the bully. One student explained, "I find myself right, I will intervene, frankly, it depends on the event." "I intervene incident if I find him right in my way. Frankly, that depends on the situation." Another student stated, "I know men are more dominant. Even if the girl is wrong; I intervene...." Gains and cost predictions include some like gaining power and status, creating a good impression, and disrupted relationships. There are expressions of the students such as "... I feel my sense of victory.", "I win the hearts and minds of the victim" "The bully can bear a grudge against you", "I can lose the friendship of the bully" Thus one can change the targeted behavior by re-deciding or can remain decided on this behavior. For example from interpersonal values, despite one with the value of maintaining social order also feeling empathy for the victim, one can remain unresponsive by taking the position of not being friends with the victim, predicting the bully will also mess with them, and ignoring the result of this behavior.

The result of targeted behavior transforming into action is observed apart from *an exhibited behavior*. Exhibited behaviors are seen in the form of supporting the victim, being unresponsive, or supporting the bully. Supporting the victim can take place in the form of direct intervention with the victim, direct intervention with the bully, intervening with both sides, or being unresponsive. Additionally, these interventions can behaviors that directly support the victim, like trying to calm the victim, or indirectly,

like telling a teacher. One student explained, "If she stays silent, then I make my voice instead." Unresponsiveness is seen in the form of distancing by being indifferent, watching, and being unwilling. One student stated, "I'm looking at what I am doing at that time." Supporting the bully can be exhibited in the form of being entertained by it, being near the bully, escalation, and reacting to those intervening. One student explained, "... they also push those who break the fight away from the classroom." One gives *self-feedback* as a result of the *exhibited behavior*. This self-feedback is realized affectively and cognitively. One student explained, "Human feels happy..... You feel comfortable when the incident stops" another student stated, "It makes me happy to stand victim side, to show the victim that he is not alone and to keep him stay strong." As a result of this whole process, the individual draws on the lesson, and this lesson especially changes one's *emotional triggers*. Thus one can develop an alternative reaction or maintain the same behavior for *future witness experiences*. As a result, the model shown in Figure 1 has been reached by establishing a link between these themes:

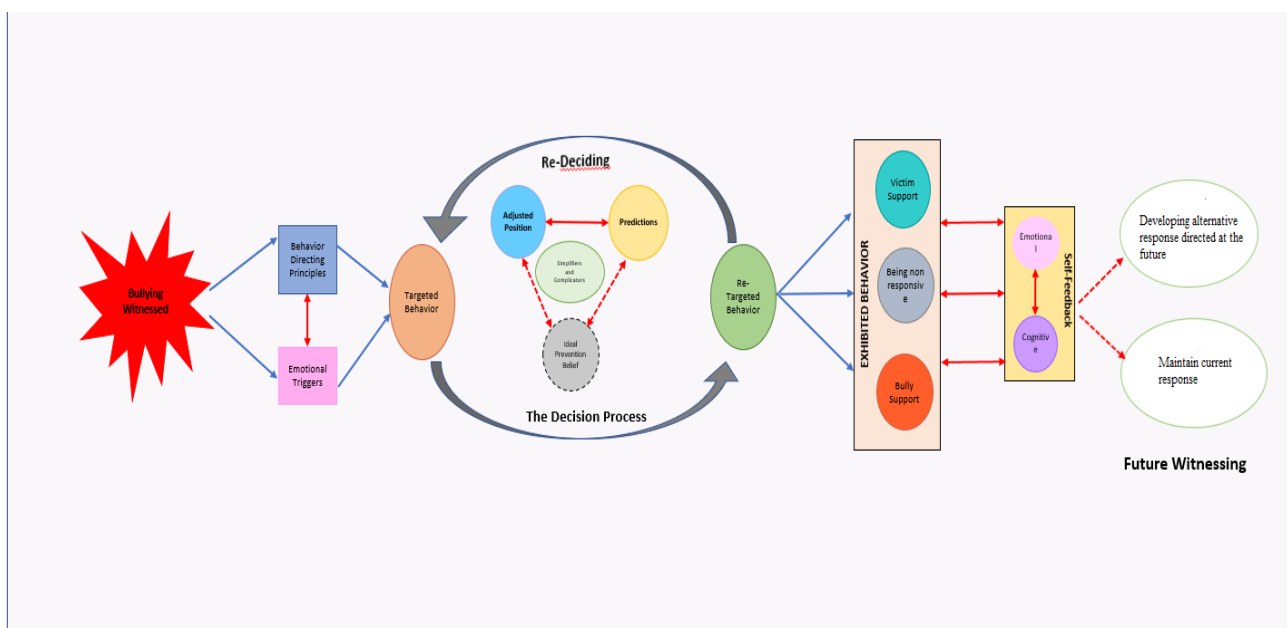


Figure 1: The witness of bullying experiences

DISCUSSION, CONCLUSION & SUGGESTIONS

The model designed in the qualitative findings of the research comprehensively discusses the behaviors of the individual from the moment of becoming a witness to bullying. This developed model contributes to the literature on this subject through its different and similar aspects with previous models related to being a witness (Chen, Chang, & Cheng, 2016; Forsberg, Thornberg, & Samuelsson 2014; Thornberg et al., 2012).

When analyzing being a witness to bullying as the first finding of the study, the participants are seen first talking about physical bullying when bullying was mentioned. In this case, physical bullying is understood to be taken more seriously, as the results from other studies (Forsberg et al., 2014; Thonberg, Langren, & Wiman, 2018). Also, participants are seen mentioning behavior-directing principles and emotional triggers in the case of bullying. Just as one can appreciate the sense of justice about bullying being undeserved (e.g., Cappadocia, Pepler, Cummings, & Craig, 2012), so can one appreciate power because of the thrill created by the power bullying possesses (e.g., Elliot, 2002). Besides, research results exist on people's judgments also directed at bullies and victims in a way that overlaps with the findings of the

current research (Thonberg, 2015; Thonberg & Knutsen, 2011). Empathy has been emphasized in this study by many participants. Those defending the victim have also been found to have higher empathy levels in different studies (Pöyhönen, Juvonen, & Salmivalli, 2010; Mitsopoulou & Giovazolias, 2015; Williford et al., 2016; López-Pérez et al., 2017; Pozzoli, Gini, & Thornberg, 2017; Xie & Ngai, 2020; Wang, 2020). This is because activating empathy also raises one's sense of responsibility (Paciello et al., 2013). Despite being based on the process, these findings show that empathy can also change the direction of bullying just as certain facilitating and complicating factors enable maintaining targeted behaviors. People's behaviors in the role of witness show diversity according to the surrounding possibilities (Ross et al., 2017). Also prosocial (making promises for something in return etc.) and coercive (accessing resources by deceiving etc) resource control strategies attribute to the behavior of bystander, victim, and bully (Clark et al, 2019). The findings obtained on the witness' exhibited behavior patterns appear consistent with the literature in this field (e.g., Coloroso, 2005, 2011; Craig, Pepler, & Atlas, 2000; Rigby & Slee, 1991; Tapper & Boulton, 2005).

Emphasis is seen made in the qualitative section of the research on friendship and recognition for the theme of taking a position in the decision-making process. Friendship can make intervening in bullying easier. While witness tries and defends the victim when they are friends with the victim, when they are friends with a bully, the witness can find ending that friendship to be easier, such as being able to choose to remain unresponsive (Thornberg, Landgren, & Wiman, 2018; Wachs et al, 2020). On the other hand, being friends with a bully can also bring about supporting the bully (McLaughlin, Arnold, & Boyd, 2005; Ross et al., 2017). Positive class climates (Raskauskasa et al., 2010), positive peer group status (Pronk et al, 2018), peer norms (Pozzoli & Gini, 2010) have a relationship with supporting the victim. Social exclusion of peers can be determining bystander responses (Forbes, et al.,2020).

Those who defend the victim are seen to emphasize fair justice. Witnesses find intervening difficult when they see the victim is wrong. This result appears consistent with the literature (Forsberg et al., 2016; Thornberg, Landgren, & Wiman, 2018). Belief in a just world is considered able to trigger the justification of behavior by blaming the victim for bullying (Correia & Dalbert, 2008; Correia, Kamble, & Dalbert, 2009). So, emotions can be a major predictor of bystander behavior (Trach & Hymel, 2020).

A cognitive and emotional self-feedback is experienced concerning the process a person lives in the aftermath of the witness experience. As a result of this feedback, negative or positive cognitive and emotional feedback can lay the groundwork for trying alternative behaviors in the future or for maintaining the same behavior. The literature has also shown altruistic behavior to make people feel better; to rid them of feelings of guilt (Freedman, Sears, & Carlsmith, 1998); to increase self-esteem; and to be rewarded by the victim with gratefulness, praise, honor, victory, and so forth (Piliavin, Piliavin, & Rodin, 1975). Individuals become upset when unable to intervene, feeling anger, rage, helplessness, and anxiety (Elliot, 2002). Those who remain unresponsive damage their self-confidence and self-respect in their feelings of guilt and fear (Coloroso, 2005). The findings emphasize empathy and situational conditions in the process of witnessing bullying.

In the present study, the witnesses' experiences were discussed in parallel to bullying behavior. However, the fact that the research only covers high school students constitutes a limitation for the study. Further studies can be designed to include middle school and/or younger students, where bullying is common. Considering the current study was based on qualitative data collection methods, future studies can be carried out with mixed data collection method, in which both quantitative and qualitative data methods

are used together. In this way, it would be possible to access the subjective stories and experiences of bullying witnesses. Although this empirically designed study is enlightening for practitioners, psychoeducation programs can be organized to prevent bullying with witnesses. It is thought that in addition to potential bullies and victims; anti-bullying programs including witness students, teachers, and administrators can be added to school policies by taking the obtained data from the current study into account.

REFERENCES

- Cappadocia, M. C., Pepler, D., Cummings, J. G., & Craig, W. (2012). Individual motivations and characteristics associated with bystander intervention during bullying episodes among children and youth. *Canadian Journal of School Psychology, 27* (3), 201-216. <https://doi.org/10.1177/0829573512450567>
- Chen, L. M., Chang, L. Y., & Cheng, Y. Y. (2016). Choosing to be a defender or an outsider in a school bullying incident: Determining factors and the defending process. *School psychology international, 37*(3), 289-302. <https://doi.org/10.1177/0143034316632282>
- Clark, K.N., Dorio, N.B., Demaray, M.K. et al. (2019). Understanding bullying, victimization, and bystander behaviors through resource control theory. *Child Youth Care Forum* <https://doi.org/10.1007/s10566-019-09539-z>.
- Coloroso, B. (2005). A bully's bystanders are never innocent. *The Education Digest, 70* (8),49-51.
- Coloroso, B. (2011). Bully, bullied, bystander... and beyond. *The Education Digest, 77* (4),36-39.
- Corbin, J. & Strauss, A. (1990). Grounded theory research: procedures, canons, and evaluative criteria. *Qualitative Sociology, 13* (1), 3-21. <https://doi.org/10.1007/BF00988593>
- Correia, I., & Dalbert, C. (2008). School bullying: Belief in a personal just world of bullies, victims, and defenders. *European Psychologist, 13*(4), 248-254. <https://doi.org/10.1027/1016-9040.13.4.248>
- Correia, I., Kamble, S.V. & Dalbert, C. (2009) Belief in a just world and well-being of bullies, victims and defenders: a study with Portuguese and Indian students. *Anxiety, Stress, & Coping: An International Journal, 22* (5), 497-508. <https://doi.org/10.1080/10615800902729242>
- Craig, W.M., Pepler, D.J., & Atlas, R. (2000). Observations of bullying in the playground and in the classroom. *School Psychology International, 21*(1), 22- 36. <https://doi.org/10.1177/0143034300211002>
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. (4th edition). Pearson.
- Çınkır, Ş. ve Kepenekçi, Y. K. (2003). Öğrenciler arası zorbalık. *Kuram ve Uygulamada Eğitim Yönetimi, 34*(34), 236-253.
- Demaray, M. K., Summers, K.H., Jenkins, L.N. & Becker, L.D. (2016) Bullying participant Behaviors Questionnaire (BPBQ): Establishing a reliable and valid measure, *Journal of School Violence, 15* (2), 158-188, <https://doi.org/10.1080/15388220.2014.964801>
- Dwyer, K. K., Bingham, S. G., Carlson, R. E., Prisbell, M., Cruz, A. M., & Fus, D. A. (2004). Communication and connectedness in the classroom: Development of the Connected Classroom Climate Invent *Communication Research Reports, 21*(3), 264-272. <https://doi.org/10.1080/08824090409359988>
- Elliot, M. (2002). *Bullying: A practical guide to coping for schools*. (3rd edition). Trans-Atlantic Publications.
- Eliot, M., Cornell, D., Gregory, A., & Fan, X. (2010). Supportive school climate and student willingness to seek help for bullying and threats of violence. *Journal of school psychology, 48*(6), 533-553. <https://doi.org/10.1016/j.jsp.2010.07.001>
- Ergül, A. (2009). *Bir grup süreci olarak ekran zorbalığı: Katılımcı rolü gruplarında tepkisel amaçlı saldırganlık ve toplumsal konum*. (Yayınlanmamış yüksek lisans tezi). Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Forbes, H., Stark, A. M., Hopkins, S. W., & Fireman, G. D. (2020). The effects of group membership on college students' social exclusion of peers and bystander behavior. *The Journal of psychology, 154*(1), 15-37. <https://doi.org/10.1080/00223980.2019.1642839>

- Forsberg, C., Thornberg, R., & Samuelsson, M. (2014). Bystanders to bullying: fourth- to seventh-grade students' perspectives on their reactions. *Research Papers in Education*, 29(5), 557-576. <https://doi.org/10.1080/02671522.2013.878375>
- Forsberg, C., Wood, L., Smith, J., Varjas, K., Meyers, J., Jungert, T. & Thornberg, R. (2016). Students' views of factors affecting their bystander behaviors in response to school bullying: a cross-collaborative conceptual qualitative analysis, *Research Papers in Education*, doi: 10.1080/02671522.2016.1271001.
- Freedman, J. L., Sears, D.O. & Carlsmith, J.M. (1998). *Sosyal psikoloji*. (A. Dönmez, çev.). (3. Baskı). İmge Kitabevi.
- González-Cabrera, J., Sánchez-Álvarez, N., Calvete, E., León-Mejía, A., Orue, I., & Machimbarrena, J. M. (2020). Psychometric properties of the triangulated version of the European Bullying Intervention Project Questionnaire: Prevalence across seven roles. *Psychology in the Schools*, 57(1), 78-90. <https://doi.org/10.1002/pits.22320>
- Goulding, C. (2001). Grounded theory: a magical formula or a potential nightmare. *The Marketing Review*, 2(1), 21-33. <https://doi.org/10.1362/1469347012569409>
- Hamby, S., Weber, M. C., Grych, J., & Banyard, V. (2015). What difference do bystanders make? The association of bystander involvement with victim outcomes in a community sample. *Psychology of Violence*, 6 (1), 91-102. <https://doi.org/10.1037/a0039073>
- Hays, D. G., Wood, C., Dahl, H., & Kirk-Jenkins, A. (2016). Methodological rigor in Journal of Counseling & Development qualitative research articles: A 15- year review. *Journal of Counseling & Development*, 94(2), 172-183. <https://doi.org/10.1002/jcad.12074>
- Howitt, D. (2010). *Introduction to qualitative methods in psychology*. Prentice Hall.
- Jenkins, L. N., & Fredrick, S. S. (2017). Social capital and bystander behavior in bullying: internalizing problems as a barrier to prosocial intervention. *Journal of youth and adolescence*, 46(4), 757-771. <https://doi.org/10.1007/s10964-017-0637-0>.
- Jenkins, L. N., & Nickerson, A. B. (2017). Bystander intervention in bullying: role of social skills and gender. *The Journal of Early Adolescence*, <https://doi.org/10.1177/0272431617735652>.
- Lamb, L. J., Hudson, C. C., Craig, W. M., & Pepler, D. J. (2017). Does defending come with a cost? Examining the psychosocial correlates of defending behaviour among bystanders of bullying in a Canadian sample. *Child Abuse & Neglect*, 65: 112-123. <https://doi.org/10.1016/j.chiabu.2017.01.012>
- Lodge, J., & Frydenberg, E. (2005). The role of peer bystanders in school bullying: Positive steps toward promoting peaceful schools. *Theory into practice*, 44(4), 329-336.
- López-Pérez, B., Hanoch, Y., Holt, K., & Gummerum, M. (2017). Cognitive and affective empathy, personal belief in a just world, and bullying among offenders. *Journal of Interpersonal Violence*, 32, 2591-2604. <https://doi.org/10.1177/0886260515593300>.
- McLaughlin, C., Arnold, R., & Boyd, E. (2005). Bystanders in schools: What do they do and what do they think? factors influencing the behaviour of english students as bystanders, *Pastoral Care in Education*, 23 (2), 17-22. <https://doi.org/10.1111/j.0264-3944.2005.00327.x>
- Mitsopoulou, E., & Giovazolias, T. (2015). Personality traits, empathy and bullying behavior: A meta-analytic approach. *Aggression and Violent Behavior*, 21, 61-72. <https://doi.org/10.1016/j.avb.2015.01.007>
- Oh, I., & Hazler, R. J. (2009). Contributions of personal and situational factors to bystanders' reactions to school bullying. *School Psychology International*, 30(3), 291-310. <https://doi.org/10.1177/0143034309106499>
- Olweus, D. (2001). Peer harassment: A critical analysis and some important issues. In J. Juvonen & S. Graham, (Eds). *Peer harassment in school: The plight of the vulnerable and victimized*. (pp. 3-20). The Guilford Press.
- Olweus D. (1994) Bullying at School. In L.R. Huesmann (Ed.) *Aggressive Behavior: The Plenum Series in Social/Clinical Psychology*. Springer.
- Paciello, M., Fida, R., Cerniglia, L., Tramontano, C., & Cole, E. (2013). High cost helping scenario: The role of empathy, prosocial reasoning and moral disengagement on helping behavior. *Personality and Individual Differences*, 55(1), 3-7. <https://doi.org/10.1016/j.paid.2012.11.004>

- Perdew, L. (2015). *Bullying: essential issues*. Abdo Publishing.
- Piliavin, I. M., Piliavin, J. A., & Rodin, J. (1975). Costs, diffusion, and the stigmatized victim. *Journal of Personality and Social Psychology*, 32 (3), 429-438.
- Pişkin, M. (2002). Okul zorbalığı: Tanımı, türleri, ilişkili olduğu faktörler ve alınabilecek önlemler. *Kuram ve Uygulamada Eğitim Bilimleri*, 2 (2), 531- 562.
- Pronk, J., Olthof, T., Aleva, E. A., van der Meulen, M., Vermande, M. M., & Goossens, F.A. (2020). Longitudinal associations between adolescents' bullying-related indirect defending, outsider behavior, and peer-group status. *Journal of research on adolescence*, 30, 87-99. <https://doi.org/10.1111/jora.12450>
- Pozzoli, T. (2010). *School bullying: defending the victim or looking the other way? The role of personal correlates and class norms in primary and middleschool*. (Unpublished doctoral dissertation). Dipartimento di Psicologia dello Sviluppo e della Socializzazione Università degli Studi di Padova, Padova.
- Pozzoli, T. & Gini, G. (2010). Active defending and passive bystanding behavior in bullying: the role of personal characteristics and perceived peer pressure. *Journal Abnormal Child Psychology*, 38: 815–827. <https://doi.org/10.1007/s10802-010-9399-9>.
- Pozzoli, T. & Gini, G. (2013). Friend similarity in attitudes toward bullying and sense of responsibility to intervene, *Social Influence*, 8:2-3, 161-176. <https://doi.org/10.1080/15534510.2012.716372>
- Pozzoli, T., Gini, G., & Thornberg, R. (2017). Getting angry matters: Going beyond perspective taking and empathic concern to understand bystanders' behavior in bullying. *Journal of adolescence*, 61: 87-95. <https://doi.org/10.1016/j.adolescence.2017.09.011>
- Pozzoli, T., Gini, G., & Vieno, A. (2012). The role of individual correlates and class norms in defending and passive bystanding behavior in bullying: A multilevel analysis. *Child Development*, 83(6), 1917-1931. <https://doi.org/10.1111/j.1467-8624.2012.01831.x>
- Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2010). What does it take to stand up for the victim of bullying?: The interplay between personal and social factors. *Merrill-Palmer Quarterly*, 56 (2), 143-163.
- Raskauskas, J. L., Gregory, J., Harvey, S. T., Rifshana, F., & Evans, I. M. (2010). Bullying among primary school children in New Zealand: Relationships with prosocial behaviour and classroom climate. *Educational Research*, 52(1), 1-13. <https://doi.org/10.1080/00131881003588097>
- Rigby, K. (2007). *Bullying in schools: And what to do about it*. Acer Press.
- Rigby, K. (2003). *Stop the bullying: a handbook for schools*. Aust Council For Editional Research.
- Rigby, K. & Johnson, B. (2006). Expressed readiness of Australian schoolchildren to act as bystanders in support of children who are being bullied, *Educational Psychology*, 26 (3), 425-440. <https://doi.org/10.1080/01443410500342047>
- Rigby, K., & Johnson, B. (2005). Student bystanders in Australian schools. *Pastoral Care in Education*, 23 (2), 10-16. <https://doi.org/10.1111/j.0264-3944.2005.00326.x>
- Rigby, K. & Slee, P.T. (1991) Bullying among Australian school children: reported Behavior and attitudes toward victims, *The Journal of Social Psychology*, 131(5), 615-627. <https://doi.org/10.1080/00224545.1991.9924646>.
- Ross, S. W., Lund, E. M., Sabey, C., & Charlton, C. (2017). *Students' perspectives on bullying*. In L. H. Rosen, K. DeOrnellas & S. R. Scott (Ed.). *Bullying in School Perspectives from School Staff , Students, and Parents* (pp. 23-47). Palgrave Macmillan.
- Salmivalli, C. (1999). Participant role approach to school bullying: Implications for interventions. *Journal of adolescence*, 22(4), 453-459. <https://doi.org/10.1006/jado.1999.0239>.
- Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status with the group. *Aggressive Behavior*, 22: 1-15. [https://doi.org/10.1002/\(SICI\)1098-2337\(1996\)22:1<1::AID-AB1>3.0.CO;2-T](https://doi.org/10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T)
- Sokol, N., Bussey, K., & Rapee, R. M. (2015). The effect of victims' responses to overt bullying on same-sex peer bystander reactions. *Journal of school psychology*, 53(5), 375-391. <https://doi.org/10.1016/j.jsp.2015.07.002>

- Song, J. & On, I. (2018). Factors influencing bystanders' behavioral reactions in cyberbullying situations. *Computers in Human Behavior*, 78:273- 282. <https://doi.org/10.1016/j.chb.2017.10.008>
- Starks, H., & Brown Trinidad, S. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative health research*, 17(10), 1372-1380. <https://doi.org/10.1177/1049732307307031>
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research*. (2nd ed.). Sage.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30(4), 526-537. <https://doi.org/10.1037/h0037039>
- Tapper, K. ve Boulton, M. J. (2005). Victim and peer group responses to different forms of aggression among primary school children. *Aggressive Behavior*, 31: 238-253. <https://doi.org/10.1002/ab.20080>
- Thornberg, R. (2017). School bullying and fitting into the peer landscape: a grounded field study. *British Journal of Sociology of Education*, 39 (1), 144- 158. <https://doi.org/10.1080/01425692.2017.1330680>
- Thornberg, R. & Jungert, T. (2013). Bystander behavior in bullying situations: basic moral sensitivity, moral disengagement and defender self-efficacy, *Journal of Adolescence*, 36 (3), 475-483. <https://doi.org/10.1016/j.adolescence.2013.02.003>
- Thornberg, R., Landgren, L., & Wiman, E. (2018). 'It Depends': A qualitative study on how adolescent students explain bystander intervention and non- intervention in bullying situations. *School Psychology International*, 0143034318779225. <https://doi.org/10.5811/westjem.2012.3.11792>.
- Thornberg, R., Tenenbaum, L., Varjas, K., Meyers, J., Jungert, T., & Vanegas, G. (2012). Bystander motivation in bullying incidents: To intervene or not to intervene?. *Western Journal of Emergency Medicine*, 13(3), 247-252.
- Thornberg, R., Wänström, L., Hong, J. S., & Espelage, D. L. (2017). Classroom relationship qualities and social-cognitive correlates of defending and passive bystanding in school bullying in Sweden: A multilevel analysis. *Journal of School Psychology*, 63, 49-62. <https://doi.org/10.1016/j.jsp.2017.03.002>.
- Trach, J., & Hymel, S. (2020). Bystanders' affect toward bully and victim as predictors of helping and non-helping behaviour. *Scandinavian journal of psychology*, 61(1), 30-37. <https://doi.org/10.1111/sjop.12516>
- Wachs, S., Görzig, A., Wright, M. F., Schubarth, W., & Bilz, L. (2020). Associations among adolescents' relationships with parents, peers, and teachers, self- efficacy, and willingness to intervene in bullying: a social cognitive approach. *International Journal of Environmental Research and Public Health*, 17(2), 420. <https://doi.org/10.3390/ijerph17020420>.
- Wang, S. (2020). Standing up or standing by: Bystander intervention in cyberbullying on social media. *New Media & Society*, 1461444820902541. <https://doi.org/10.1177/1461444820902541>
- White, L., Hammonds, F., & Valkyrie, K. T. (2014). Bullying: Bullies, victims, and witnesses. *Modern Psychological Studies*, 20(1), 1-14.
- Williford, A., Boulton, A. J., Forrest-Bank, S. S., Bender, K. A., Dieterich, W. A., & Jenson, J. M. (2016). The effect of bullying and victimization on cognitive empathy development during the transition to middle school. *Child & Youth Care Forum*, 45, 525-541. <https://doi.org/10.1007/s10566-015-9343-9>
- Xie, H., & Ngai, S. S. Y. (2020). Participant roles of peer bystanders in school bullying situations: evidence from Wuhan, China. *Children and Youth Services Review*, 110: 104762. <https://doi.org/10.1016/j.childyouth.2020.104762>

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HE: Idea and design, data analysis, interpretation of findings, reporting of the article.

TTK: Idea and design, data collection and analysis, interpretation of findings, reporting of the article.

Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

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Ethical Statement

The study was carried out within the framework of the Helsinki Declaration and all participants whose informed consents were obtained took part in this study as volunteers. Required permits were obtained to use the scales in this study. The participants were informed of the goals of the project and they were told that their identities would be kept confidential.

RESEARCH

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ARAŞTIRMA

Açık Erişim

Predicting Career Decision-Making Difficulties: The Role of Barriers, Self-Efficacy, and Decision Status

Kariyer Karar Verme Güçlüklerinin Yordanması: Engeller, Öz-Yetkinlik ve Karar Durumunun Rolü

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ABSTRACT

The aim of this research was to investigate the relationship between career decision-making difficulties and career barriers, career decision-making self-efficacy, and decision status of university students. The participants were 426 (284 female, 142 male) university students. Data of the study were collected by using the Career Decision Making Difficulties Questionnaire (CDDQ), Perceived Career Barriers Scale (PCBS), Career Decision Self-Efficacy Scale–Short Form (CDESES-SF), and Personal Information Form. Multiple linear regression analysis was used for data analysis. Correlation values were examined to check whether there was multicollinearity among variables. The analyses propounded that perceived career barriers, career decision-making self-efficacy, and decision status (decision-making / not making) explained 45% of the total variance related to career decision-making difficulties. It was found that decision status was the most important predictor of the total career decision-making difficulties, and lack of readiness, lack of information, and inconsistent information subscales.

Article Information

Keywords

University Students
Career Decision-Making Difficulties
Career Barriers
Career Decision-Making Self-Efficacy
Decision Status

Anahtar Kelimeler

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ÖZET

Bu araştırmanın amacı, üniversite öğrencilerinin kariyer karar verme güçlükleri ile kariyer engelleri, kariyer karar verme öz-yetkinlikleri ve karar durumları arasındaki ilişkilerin incelenmesidir. Araştırma 426 üniversite (284 kadın, 142 erkek) öğrencisi üzerinde gerçekleştirilmiştir. Araştırmanın verileri Kariyer Karar Verme Güçlükleri Ölçeği (CDDQ), Algılanan Kariyer Engelleri Ölçeği (PCBS), Kariyer Kararı Öz-Yetkinlik Ölçeği-Kısa Form (CDESES-SF) ve Kişisel Bilgi Formu aracılığıyla toplanmıştır. Verilerin analizinde çoklu doğrusal regresyon analizi kullanılmıştır. Değişkenler arasında çoklu ortak doğrusallığın olup olmadığını kontrol etmek için ise korelasyon değerleri incelenmiştir. Analizler sonucunda algılanan kariyer engelleri, kariyer karar verme öz-yetkinliği ve karar durumlarının (karar verme/vermeme) birlikte kariyer karar verme güçlüklerine ilişkin toplam varyansın %45'ini açıkladığı görülmüştür. Karar durumlarının, toplam kariyer karar verme güçlüklerinin ve hazırlık eksikliği, bilgi eksikliği ve tutarsız bilgiler alt ölçeklerinin en güçlü yordayıcısı olduğu bulunmuştur.

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INTRODUCTION

People face many decision-making situations throughout their lives. One of the most important decision-making situations could be associated with career decisions as this type of decision have the power to determine people's future lifestyles (Amir & Gati, 2006). Thus, many scholars have conducted research aiming to determine the factors related to career decision-making. According to the results of the existing study, it was understood that the career decision was influenced by the individuals' interests, abilities, personality traits (Di Fabio, Palazzeschi, Asulin-Peretz, & Gati, 2013; Di Fabio, Palazzeschi & Bar-On, 2012; Kırdök & Korkmaz, 2018; Newman, Gray, & Fuqua, 1999; Öztemel, 2012; Öztemel, 2014; Page, Bruch, & Haase, 2008; Penn & Lent, 2019; Sweeney & Schill, 1998); relationships with family and people who are close to them (Dursun & Kara, 2019; Hamamcı, Bacanlı, & Doğan, 2013; Hirschi, Niles, & Akos, 2011; Işık, 2013; Kim, Ahn, & Fouad, 2016; Metheny & McWhirter, 2013); developments in the business world (Arthur, Khapova, & Wilderom, 2005; Neault, 2002) and many other factors.

Based on the previous studies, it can be said that deciding on a career is a complex process that requires organizing a lot of information about the self and the business world and choosing among various alternatives based on this information (Fuqua & Hartman, 1983; Jepsen, 1984; Sauermann, 2005). This situation causes many individuals to have difficulties in choosing a career. The difficulties experienced result in negativities such as not being able to make a decision or making an inappropriate choice (Gati, Krausz, & Osipow, 1996). This often results in low job performance, low job satisfaction, unhappiness, and failure (Kırdök, 2010). One of the most important goals of career counseling is to help these individuals make the most appropriate decision by dealing with the difficulties they face (Cochran, 1994; Gati, Kleiman, Saka, & Zakai, 2002; Swank & Jahn, 2018). In order to achieve this goal, the difficulties experienced by the individuals need to be determined first. Accordingly, Gati, Krausz, and Osipow (1996) developed the "Career Decision Making Difficulties Taxonomy" in order to enable individuals to make more effective decisions.

According to the career decision-making difficulties taxonomy, the difficulties encountered in the process of decision-making consists of three main categories labeled as lack of readiness, lack of information, and inconsistent information. The first mentioned main category, lack of readiness includes subcategories as lack of motivation, general indecisiveness, and dysfunctional beliefs. While lack of information category involves subcategories of lack of information about the decision-making process, lack of information about the self, lack of information about occupations, and lack of information about ways of obtaining additional information. The third main category, inconsistent information, on the other hand, consists of unreliable information, internal conflicts, and external conflicts subcategories (Gati et al., 1996). These three main categories depict that career indecision does not depend on a single reason. That is to say, an individual in the career decision-making process is faced with many internal or external events and conditions that make the decision process difficult. These events and conditions, referred to as "career barriers" by Swanson and Woitke (1997), were studied in a wide spectrum, including ethnic differences (Cardoso & Marques, 2008; Luzzo, 1993; McWhirter, 1997; Meija-Smith & Gushue, 2017), low self-esteem (Patton, Creed, & Watson, 2003; Creed, Patton, & Bartrum, 2004), gender (Cardoso & Marques, 2008; Luzzo, 1995; McWhirter, 1997), discrimination, and insufficient support (Lent, Brown, & Hackett., 2000; Li, Wang, & Kim, 2020; Swanson & Woitke, 1997).

In addition to career barriers, career decision-making self-efficacy, which is defined as the belief that individuals can complete the tasks required to make career decisions (Taylor & Betz, 1983), is also

considered one of the most important concepts in terms of the decision process. Studies (Cardoso & Moreira, 2009; Kelly & Hatcher, 2013; Lam & Santos, 2018; Luzzo, 1996; Patton, Creed & Watson, 2003; Quimby & O'Brien, 2004; Santos, Wang & Levis, 2018; Storme, Celik & Myszkowski, 2019) showed that low-level career decision self-efficacy has a positive relationship with career decision making difficulties. To put it more clearly, it can be said that low-level career self-efficacy eliminates possible career options for individuals, and this situation causes difficulties in the career selection process and prevents a suitable career choice (Amir & Gati, 2006; Betz & Hackett, 1981; Brown & Rector, 2008; Coon, 2008; Creed & Yin, 2006; Lam, 2016; Morgan & Ness, 2003; Storme & Celik, 2017).

Once the literature on career decision-making is scrutinized, it was understood that the concepts of career decision-making difficulties, career barriers, and career decision-making self-efficacy have a significant role in individuals making a suitable career choice (Anghel & Gati, 2019; Betz & Voyten, 1997, Gati et al., 1996; Guay, Ratelle, Sénécal, 2006; Jiang, 2016; Larose & Deschênes, 2006; Nota, Ferrari, Solberg & Soresi, 2007; Öztemel, 2012; Patton, Creed & Watson, 2003; Pulliam, Ieva & Burlew, 2017; Vertsberger & Gati, 2016). In addition, findings show that both career barriers and career decision-making self-efficacy are related to career decision-making difficulties. To illustrate, the previous studies showed that career barriers make career progression difficult for individuals (Özyürek, 2013) by limiting professional research behavior (Balın, 2008; Leal-Muniz & Constantine, 2005) and selection goals (Sürücü, 2011). Similarly, research has revealed that low-level career decision self-efficacy is associated with career decision-making difficulties and career indecision (Fouad, Cotter, & Kantamneni, 2009; Jemini-Gashi, Duraku, & Kelmendi, 2019; Morgan & Ness, 2003; Öztemel, 2012). Additionally, it was observed that the situation of making a decision about career choice or not is important in terms of the career decision-making process, and those who have made a decision about career choice experience less career decision-making difficulty and career indecision (Bacanlı, 2012; Öztemel, 2012; Tien, 2001).

Accordingly, it can be said that these aforementioned concepts need to be taken into consideration at any stage of career selection during the career development process. Considering that especially university students who are in the transition from school life to business life face many uncertainties and therefore experience indecision (van Vianen, De Pater, & Preenen, 2009), it is necessary to examine the relationship between these individuals' career decision-making difficulties, career barriers, career decision-making self-efficacy, and decision status. In addition, career decision-making difficulties consist of three different categories: lack of readiness, lack of information, and inconsistent information, and each category has different qualities (lack of readiness is related to difficulties that arise before the decision-making process, lack of information, and inconsistent information are difficulties in the decision-making process); therefore, it is thought to be important to examine the relationships of these variables with the categories of career decision-making difficulties.

In line with this significance and necessity for research, the current study scrutinized the possible relationships between career decision-making difficulties, career barriers, career decision-making self-efficacy, and university students' decision status in Turkey. Accordingly, the following research questions were sought:

Do perceived career barriers total scores, career decision-making self-efficacy total scores, and decision status (decision making/not making) together;

1. Significantly predict career decision-making difficulties total scores?

2. Significantly predict lack of readiness, lack of information, and inconsistent information subcategory scores?

METHOD

Research Model

The current research is a relational study conducted to examine whether university students' perceived career barriers, career decision-making self-competencies, and decision-making situations (decision making / not making) predict career decision-making difficulties.

Study Group

This research was conducted on 426 undergraduate students (average age: 22.13) enrolled in various departments of a state university in Ankara in the academic year of 2017-2018. The research group consisted of students at the university on the day of data collection and volunteered to participate in the study. 284 (66.7%) of the participants were female, and 142 (33.3%) were male. 30 (7%) of the students were freshmen, 20 (4.7%) of them were sophomores, 145 (34%) of them were juniors, and 231 (54.2%) of them were seniors.

Ethical Statement

The ethics committee of Gazi University was consulted for ethical approval of this study. With the document dated 14.05.2018 and numbered E.76235, it was decided that the study was ethically appropriate. The participants were informed of the goals of the study and they were told that their identities would be kept confidential.

Data Collection Tools

Career Decision Making Difficulties Questionnaire-University Form (CDDQ-UF). The original scale developed by Gati and Saka (2001) was adapted to university students in Turkey by Bacanlı & Öztemel (2017). The results of the analysis showed that, as in the original scale, CDDQ-UF is divided into three main categories: Lack of Readiness (LR), Lack of Information (LI), and Inconsistent Information (II).

CDDQ-UF is a nine-point Likert-type scale consisting of 34 items, two of which are controlling ones. The high scores obtained from the scale indicate the intensity of individuals' career decision-making difficulties. The Cronbach alpha reliability coefficients of the Turkish version of the scale were calculated as $\alpha=.64$ for the lack of readiness category, $\alpha=.95$ for the lack of information category, $\alpha=.93$ for the inconsistent information category, and $\alpha=.94$ for the entire scale (Bacanlı & Öztemel, 2017). In addition, Cronbach alpha reliability coefficients for current research were found to be $\alpha=.51$ for lack of readiness category, $\alpha=.92$ for lack of information category, $\alpha=.88$ for inconsistent information category, and $\alpha=.92$ for the whole scale.

Perceived Career Barriers Scale (PCBS). PCBS developed by Sürücü (2011) is a 33-item five-point Likert type scale which consists of eight dimensions: gender discrimination, the future of the profession and labor market limitations, difficulties regarding professional education and working conditions of the profession, lack of aptitude and interest, lack of motivation and inadequate preparation, moving, personal problems, and the influence of family and environment. High scores obtained from the scale indicate the

intensity of career barriers that the individuals perceive. The total score can be calculated from the PCBS and the scores related to its dimensions.

Cronbach alpha reliability coefficient and test-retest reliability were examined in order to determine the reliability of PCBS and its sub-dimensions. Within the process of the test-retest reliability, PCBS was applied to 61 participants studying in the departments of Mathematics Teaching and History Teaching at two-week intervals (Sürücü, 2011).

Cronbach alpha reliability coefficients of PCBS was calculated as $\alpha=.91$ for the gender discrimination, $\alpha=.89$ for the future of the profession and labor market limitations, $\alpha=.79$ for the difficulties regarding professional education and working conditions of the profession, $\alpha=.75$ for the lack of aptitude and interest, $\alpha=.72$ for the lack of motivation and inadequate preparation. $\alpha=.72$ for the moving, $\alpha=.65$ for the personal problems, $\alpha=.53$ for the influence of family and environment, and $\alpha=.92$ for the whole scale. The test-retest reliability results were found to be $\alpha=.67$ for the gender discrimination, $\alpha=.45$ for the future of the profession and labor market limitations, $\alpha=.50$ for the difficulties regarding professional education and working conditions of the profession, $\alpha=.62$ for the lack of aptitude and interest, $\alpha=.47$ for the lack of motivation and inadequate preparation, $\alpha=.75$ for the moving, $\alpha=.73$ for the personal problems, $\alpha=.46$ for the influence family and environment, and $\alpha=.75$ for the whole scale (Sürücü, 2011). In addition, the internal consistency coefficient was calculated for the entire scale within the scope of this research and was found as $\alpha=.91$.

Career Decision Self-Efficacy Scale-Short Form (CDSES-SF). The Career Decision Self-Efficacy Scale-Short Form (Betz et al., 1996), which was created by removing 25 items from the Career Decision Making Self-Efficacy Scale developed by Taylor and Betz (1983), was adapted into Turkish by Büyükgöze-Kavas (2014). CDSES-SF is a five-point Likert-type scale consisting of 25 items.

The original form created by Betz et al. (1996) consists of five components: self-appraisal, occupational information, goal selection, planning, and problem-solving. However, factor analysis studies conducted by different researchers regarding the construct validity of the scale did not confirm the five-component structure in the original form (Gaudron, 2011; Hampton, 2005). Therefore, it is recommended to use the total score in evaluating the self-efficacy of making career decisions (Creed, Patton, & Watson, 2002; Watson, Brand, Stead, & Ellis, 2001).

Betz et al. (1996) calculated the original form's Cronbach alpha reliability coefficient as $\alpha=.94$ and the test-retest reliability coefficient as $\alpha=.83$. In order to determine the reliability of the Turkish form of the scale, Cronbach alpha reliability coefficient and test-retest reliability were examined. Within the process of the test-retest reliability, CDSES-SF was conducted with 52 participants at two weeks intervals. As a result, the Cronbach alpha coefficient of the Turkish form was calculated as $\alpha=.92$ and test-retest reliability as $\alpha=.91$ (Büyükgöze-Kavas, 2014). In addition, the internal consistency coefficient was calculated for the entire scale within the scope of this research and was found as $\alpha=.91$.

Personal Information Form. The personal information form prepared by the researcher includes questions about gender, department of education, grade level, and decision status (Did you make the final decision about your career choice?).

Data Collection

During the data collection process, various departments from the Education and Technology faculties of the university selected for the research group were determined. The necessary permission letters from Gazi University Ethics Committee (14/05/2018-E.76235) were obtained, and the faculty members in the departments where data would be collected were contacted, and their permission was asked to practice in their courses. After this process, the application battery consisting of a total of 107 items (CDDQ-UF, PCBS, CDESES-SF, and Personal Information Form) was administered by the researcher to the students who were present in class on the data collection day and volunteered to participate in the study. Before the administration, the instructions of the measurement tools were explained by the practitioner, and the participants were informed about the purpose of the research. The administration of the measuring tools lasted approximately 20 minutes.

Data Analysis

The data collected from the participants were transferred to the electronic environment. SPSS 21.0 package program was used to analyze the data. In this study, multiple linear regression analysis was applied to the data to examine whether career barriers, career decision-making self-efficacy, and decision-making (decision making / not making) predicted career decision-making difficulties. Before starting the regression analysis, correlation values were examined to check whether there was multiple common linearity between variables. Thus, Pearson product moment correlation coefficient was calculated between continuous variables, and the binary correlation coefficient between continuous variables and categorical variables was calculated.

Limitations

There are several limitations of the current study. To begin with, this study is limited to university students studying in various departments of a state university in Ankara. Thus, the findings obtained within the scope of the study can only be generalized to university students with similar characteristics. In addition, career decision-making difficulties, perceived career barriers, and career decision-making self-efficacy levels of university students participating in this study are limited by the dimensions and measurements calculated by the measurement instruments developed to measure these variables. Hence, this situation can be regarded as a limitation of the research.

RESULTS

Firstly, this section discusses whether career barriers, career decision-making self-efficacy, and decision-making (decision-making / not-making) predict career decision-making difficulties are included.

The total scores of the students in the study group from CDDQ and its subscales, PCBS, CDESES-SF, and the averages, standard deviations, and correlation values of the decision status (decision making / not making) are presented in Table 1.

Table 1. Correlation coefficients between variables in the regression model

Variables	\bar{x}	SS	1	2	3	4	5	6	7
1.CDDQ	123.43	38.09	-	.66***	.93***	.89***	.43***	-.42***	.61***
2.LR	48.13	9.93		-	.47***	.41***	.19***	-.14**	.30***
3.LI	41.57	19.00			-	.74***	.38***	-.44***	.58***
4.II	33.73	15.69				-	.48***	-.41***	.59***
5.PCBS	68.40	19.31					-	-.24***	.13*
6.CDSES	84.91	13.89						-	-.28***
7.Decision Status.****									-

* $p < .05$, ** $p < .01$, *** $p < .001$,
 **** Not making decision

The results of multiple linear regression analysis conducted to the data to determine the predictive power of the total scores obtained from the PCBS and CDSES-SF and the decision status to the total scores obtained from the CDDQ are presented in Table 2.

Table 2. Multiple regression analysis results for the prediction of CDDQ scores

Variables	B	SE	β	t	P
Constant	120.508	11.584		10.403	.000
PCBS	.650	.074	.330	8.814	.000*
CDSES-SF	-.682	.105	-.249	-6.509	.000*
Decision Status**	30.576	2.845	.401	10.748	.000*

$R = .67$, $R^2 = .45$, $F(3,422) = 113.302$, $*p < .001$
 ** Not making decision

As it is depicted in Table 2, total scores from PCBS and CDSES-SF and decision status significantly predict the total scores from CDDQ (Multiple $R = .67$; $R^2 = .45$; $F(3-422) = 113.302$, $p < .001$). This finding showed that PCBS and CDSES-SF scores and decision status explained 45% of the total variance regarding the scores of CDDQ. According to the ' β ' coefficients of the predictive variables, it was understood that decision status ($\beta = .401$) is the strongest predictor of career decision-making difficulties among the three predictor variables. In addition, it was understood that the perceived career barriers ($\beta = .330$) and the career decision-making self-efficacy ($\beta = -.249$) each significantly predicted the career decision-making difficulties ($p < .001$).

The multiple linear regression analysis conducted to the data to determine the predictive power of the total scores obtained from the PCBS and CDSES-SF and the decision status to the total scores obtained from the LR subscale are depicted in Table 3.

Table 3. Multiple regression analysis results on the prediction of LR subscale scores

Variables	B	SE	β	t	P
Constant	43.569	3.878		11.234	.000
PCBS	.078	.025	.152	3.160	.002*
CDSES-SF	-.036	.035	-.050	-1.028	.305
Decision Status***	4.268	.952	.215	4.480	.000**

$R = .30$, $R^2 = .09$, $F(3,422) = 13.462$, $*p < .01$, $**p < .001$
 ** Not making decision

As it is depicted in Table 3, total scores from PCBS and CDSES-SF and decision status significantly predict the scores from the LR subscale (Multiple $R = .30$; $R^2 = .09$; $F(3-422) = 13,462$, $p < .001$). This finding showed that PCBS and CDSES-SF scores and decision status explain 9% of the total variance regarding LR subscale scores. According to the ' β ' coefficients of the predictive variables, it was understood that decision status ($\beta = .215$) was the strongest predictor of lack of readiness among the

three predictor variables. In addition, it was understood that perceived career barriers ($\beta = .152$) significantly predicted lack of readiness ($\beta < .01$). On the other hand, career decision-making self-efficacy ($\beta = -.050$) was not seen as a significant predictor ($p > .05$) of scores related to lack of readiness.

The results of multiple linear regression analysis conducted to the data to determine the predictive power of the total scores obtained from the PCBS and CDESES-SF and the decision status to the total scores obtained from the LI subscale are depicted in Table 4.

Table 4. Multiple regression analysis results related to the prediction of LI subscale scores

Variables	B	SE	β	t	P
Constant	48.736	5.995		8.130	.000
PCBS	.264	.038	.269	6.922	.000*
CDESES-SF	-.388	.054	-.284	-7.150	.000*
Decision Status**	14.356	1.472	.377	9.751	.000*

$R = .64, R^2 = .40, F(3,422) = 95.232, *p < .001$

** Not making decision

As it is presented in Table 4, the total scores obtained from PCBS and CDESES-SF and decision status together significantly predicted the scores obtained from the LI subscale (Multiple $R = .64$; $R^2 = .40$; $F(3-422) = 95.232, p < .001$). This finding showed that PCBS and CDESES-SF scores and decision status explained 40% of the total variance regarding LI subscale scores. According to the ' β ' coefficients of the predictive variables, it was understood that decision status ($\beta = .377$) was the strongest predictor of the lack of information among the three predictor variables. In addition, perceived career barriers ($\beta = .269$) and career decision-making self-efficacy ($\beta = .284$) each were found to significantly predicted lack of information ($p < .001$).

The multiple linear regression analysis conducted to the data to determine the predictive power of the total scores obtained from the PCBS and CDESES-SF and the decision status to the total scores obtained from the II subscale are depicted in Table 5.

Table 5. Multiple regression analysis results related to the prediction of II subscale scores

Variables	B	SE	β	t	P
Constant	28.203	4.736		5.955	.000
PCBS	.308	.030	.379	10.207	.000*
CDESES-SF	-.258	.043	-.229	-6.027	.000*
Decision Status**	11.953	1.163	.380	10.276	.000*

$R = .67, R^2 = .45, F(3,422) = 117.136, *p < .001$

** Not making decision

As it depicted in Table 5, it was understood that the total scores from PCBS and CDESES-SF and decision status together significantly predicted the scores obtained from the II subscale (Multiple $R = .67$; $R^2 = .45$; $F(3-422) = 117.136, p < .001$). This finding showed that PCBS and CDESES-SF scores and decision status explained 45% of the total variance regarding II subscale scores. According to the ' β ' coefficients of the predictive variables, decision status ($\beta = .380$) and perceived career barriers ($\beta = .38$) were the strongest predictors of inconsistent information. In addition, it was understood that decision-making self-efficacy ($\beta = -.229$) solely predicted inconsistent information significantly ($p < .001$).

DISCUSSION, CONCLUSION & SUGGESTIONS

This study was conducted to examine the relationships between university students' career decision-making difficulties and career barriers, career decision-making self-competencies, and decision status. As

a result of the multiple linear regression analysis conducted to the data, the perceived career barriers and career decision-making self-efficacy total scores of the university students participating in the study together with decision status (making / not making decisions) explained 45% of the total variance related to the scores obtained from all career decision-making difficulties. Among these three variables, decision status (not making a decision) was the strongest predictor of career decision-making difficulties.

Once the relevant literature is scrutinized, it can be said that the findings of the current research supported the previous studies' findings. More specifically, Tien (2001), Tien (2005), Bacanlı (2012), and Yang and Shi (2018) found that individuals who have not yet made a career decision perceive more difficulty in making career decisions than individuals who have made their decision. Vaiopoulou, Papavassiliou-Alexiou and Stamovlasis (2019) also reported that individuals who reported fewer career decision-making difficulties were more confident in their decision. Brown and Rector (2008) showed that career barriers are an important source of career decision-making difficulties with their meta-analysis study. While Jaensch, Hirschi, and Freund (2015) and Ukil (2016) with their research, confirmed that individuals who perceive more career barriers experience more career indecision. Morgan and Ness (2003) found a negative relationship between career decision-making difficulties and career decision-making self-efficacy. Amir and Gati (2006) reported that individuals with high levels of career decision-making self-efficacy experience fewer career decision-making difficulties.

Similarly, Choi et al. (2012) and Xu and Tracey (2014) found a negative relationship between career decision-making difficulties and career decision-making self-efficacy. Previous studies on decision status, career barriers, and career decision-making self-efficacy and the current research have similar findings showed that these concepts have an important role in the emergence of career decision-making difficulties or in coping with career decision-making difficulties. Accordingly, it can be said that it is important to focus on the decision status perceived by individuals, career barriers they perceive, and career decision-making self-efficacy levels in theoretical and practical studies on career decision-making difficulties. Considering that the decision status is the strongest predictor of career decision-making difficulties, it may be suggested to determine the decision status and plan the studies aiming to examine the coping strategies of career decision-making difficulties accordingly.

Regarding subcategories, when the findings of the study were examined, it was seen that the career barriers perceived by university students and their career decision-making self-efficacy and decision status (making / not making decisions) together explained 9% of the total variance regarding the scores obtained from the lack of readiness sub-scale. The findings of the study showed that those who have not yet made a career decision get higher scores on the lack of readiness subscale. This finding is in line with some research in the relevant literature (Boo & Kim, 2020; Tien, 2001; Tien, 2005; Yang & Shi, 2018). On the other hand, some other studies show differences compared to the findings of the current research. To illustrate, Bacanlı et al. (2013) found that scores from the lack of readiness subscale did not significantly differ according to the decision status.

In addition to the findings on decision-making, the current research showed that the lack of readiness increases as perceived career barriers are thrown away. It was observed that the findings of the present study support some research in the literature. To illustrate, Farrow (2016) found that lack of readiness is associated with career barriers. Although there is no direct research showing that career barriers are predictors of lack of readiness, a meta-analysis study by Brown and Rector (2008) also showed sub-dimensions of lack of readiness (lack of motivation, general indecision, and dysfunctional beliefs) are

associated with career barriers. On the other hand, it was observed that the results between the lack of readiness subscale and career barriers were not reported in the studies as the lack of readiness subscale showed lower internal consistency coefficients than the original scale developed by Gati et al. (1996) in some scale adaptation studies in the literature (Creed, Peter, Wong & Hood, 2009; Creed & Yin, 2006). Thus, it could be said that the findings of the current study contribute to the existing literature.

Another finding obtained in the present study was that career decision-making self-efficacy did not significantly predict lack of readiness solely. Considering the structures of the Career Decision Difficulties Scale (Gati et al., 1996) and the Career Decision Self-Efficacy Scale (Betz et al., 1996), it can be said that this finding is expected as the lack of readiness category consists of three subcategories: lack of motivation, general indecision, and dysfunctional beliefs, and none of the subscales of the Career Decision Self-Efficacy Scale address these categories. Compared to the related literature, it was seen that Reese and Miller (2006) reached similar results to the current research. On the other hand, Coon (2008) found that career decision-making self-efficacy significantly predicted lack of readiness, and there was a negative relationship between career decision-making self-efficacy and lack of readiness. Besides, Walker and Tracey (2012), Bullock-Yowell, McConnell, and Schedin (2014), and Santos, Wang, and Levis (2018) also found a significant negative relationship between lack of readiness and career decision-making self-efficacy.

Compared to the related studies focusing on the predictor status of lack of readiness, it was seen that these findings were similar to some research results in the relevant literature. At the same time, they differed from some other research results. It can be said that this situation stems from the reliability level of the lack of readiness subscale is not high enough for different cultures (Bacanlı & Öztemel, 2017; Creed & Yin, 2006; Levin, Braunstein-Bercovitz, Lipshits-Braziler, Gati & Rossier, 2020; Mau, 2001; Vahedi, Farrokhi, Mahdavi & Moradi, 2012). Therefore, these findings suggest that there is a need for the development and testing of culturally appropriate items regarding lack of readiness.

In addition to the lack of readiness, as a result of the examinations made on the categories of lack of information and inconsistent information, it was seen that the career barriers perceived by university students and their career decision-making self-efficacy and decision status (making / not making a decision) explained 40% of the total variance regarding the scores obtained from the lack of information subscale and 45% of the total variance regarding the scores obtained from the inconsistent information subscale. Among these three variables, it was found that decision status (not making a decision) was the strongest predictor of lack of information and inconsistent information. In addition, it was understood that career decision-making self-efficacy and career barriers alone were significant predictors of both lack of information and inconsistent information.

Compared to the relevant literature, it was seen that the findings of the present study supported the previous studies. To illustrate, Tien (2001) and Tien (2005) found that individuals who made a decision about career choice got lower scores on the subscales of lack of information and inconsistent information. Similarly, Bacanlı et al. (2013), Boo and Kim (2020), and Bullock-Yowell, McConnell, and Schedin (2014) also revealed that decision-making about career choice creates a significant difference in the scores obtained from the lack of information and inconsistent information subscales. Creed and Yin (2006) found that CDDQ's lack of information and inconsistent information subscales were positively associated with career barriers and negatively correlated with career decision-making self-efficacy. In line with the previous finding, Creed et al. (2009) reported that individuals with high-level career decision-

making self-efficacy scored lower on the subscales of lack of information and inconsistent information, while individuals with a high level of career barrier perceived higher scores on this scale. Reese and Miller (2006) also confirmed that there was a negatively significant relationship between career decision-making self-efficacy and lack of information and inconsistent information. While Coon (2008) found that career decision self-efficacy significantly predicted lack of information and inconsistent information, and there was a negative relationship between career decision self-efficacy and inconsistent information. In addition, Di Fabio and Maree (2011) revealed that while self-efficacy for career decision-making increased, lack of information and inconsistent information decreased with their study. Xu and Tracey (2014) also showed that there is a significant relationship between career decision-making self-efficacy and lack of information and inconsistent information. The findings of previous studies and the current research findings show that decision status, career barriers, and career decision self-efficacy play an important role in understanding and responding to difficulties related to lack of information and inconsistent information. Therefore, it can be said that it is important to conduct studies to reduce perceived career barriers and increase career decision-making self-efficacy while intervening in career decision-making difficulties caused by lack of information and inconsistent information. In addition, considering that the status of making a decision about career choice or not is an important factor in understanding the lack of information and inconsistent information of individuals in the career decision-making process, it can be said that considering the decision status in future studies and conducting studies to gain decision-making skills in practical research is important in terms of coping with individuals' lack of information and inconsistent information.

When the findings are examined generally, it can be said that the research has various implications for the relevant literature in terms of theory and practice. First, considering that each of the variables of career barriers, career decision-making self-efficacy, and decision status are significant predictors of career decision-making difficulties, considering these variables in future studies and planning professional group guidance, individual and group career counseling, and psycho-education programs can be suggested. In addition, as decision status was the strongest predictor of both the total scores obtained from career decision-making difficulties and the scores obtained from the sub-dimensions of career decision-making difficulties, it may be recommended to conduct studies on teaching decision-making steps and decision-making skills while intervening in the career decision-making difficulties of students. Besides, variables such as self-esteem, perceived social support, career optimism, and external locus of control, and negative career thoughts, which may be positively related to career decision-making difficulties can be included in future studies in addition to the variables in this particular study.

REFERENCES

- Albion, M. J., & Fogarty, G. J. (2002). Factors influencing career decision making in adolescents and adults. *Journal of Career Assessment*, 10(1), 91–126. doi:10.1177/1069072702010001006
- Amir, T., & Gati, I. (2006). Facets of career decision-making difficulties. *British Journal of Guidance & Counselling*, 34(4), 483-503. doi: 10.1080/03069880600942608
- Anghel, E., & Gati, I. (2019). The associations between career decision-making difficulties and negative emotional states. *Journal of Career Development*, 1-15. doi: 10.1177/0894845319884119
- Arthur, M. B., Khapova, S. N., & Wilderom, C. P. (2005). Career success in a boundaryless career world. *Journal of Organizational Behavior*, 26(2), 177-202. doi: 10.1002/job.290
- Bacanlı, F. (2012). Kariyer karar verme güçlükleri ve meslek seçimine ilişkin akılcı olmayan inançların ilişkisi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 4(37), 86-95. Retrieved from <https://dergipark.org.tr/en/download/article-file/200085>
- Bacanlı, F., Eşici, H., ve Özünlü, M. B. (2013). Kariyer karar verme güçlüklerinin çeşitli değişkenlere göre incelenmesi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 4(40), 198-211. Retrieved from <https://dergipark.org.tr/tr/download/article-file/200301>
- Bacanlı, F., & Öztemel, K. (2017). Kariyer Karar Verme Güçlükleri Ölçeğinin genç yetişkin örnekleminde faktör yapısının ve güvenilirliğinin incelenmesi In. 26. Uluslararası Eğitim Bilimleri Kongresi 20-23 Nisan 2017 (pp.3033-3034). Antalya: Starlight Resort Hotel.
- Balın, E. (2008). *The role of perceived career barriers and gender in commitment to career choices of university students*. Master's thesis, Middle East Technical University, Ankara.
- Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, 28(5), 399-410. doi: 10.1037/0022-0167.28.5.399
- Betz, N. E., & Voyten, K. K. (1997). Efficacy and outcome expectations influence career exploration and decidedness. *The Career Development Quarterly*, 46(2), 179-189. doi: 10.1002/j.2161-0045.1997.tb01004.x
- Boo, S., & Kim, S. H. (2020). Career indecision and coping strategies among undergraduate students. *Journal of Hospitality & Tourism Education*, 32(2), 63-76. doi: 10.1080/10963758.2020.1730860
- Brown, S. D., & Rector, C. C. (2008). Conceptualizing and diagnosing problems in vocational decision making. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (pp. 392–407). Hoboken, NJ: Wiley.
- Bullock-Yowell, E., McConnell, A. E., ve Schedin, E. A. (2014). Decided and undecided students: Career self-efficacy, negative thinking, and decision-making difficulties. *Nacada Journal*, 34(1), 22-34. doi: 10.12930/NACADA-13-016
- Cardoso, P., & Marques, J. F. (2008). Perception of career barriers: The importance of gender and ethnic variables. *International Journal for Educational and Vocational Guidance*, 8(1), 49-61. doi: 10.1007/s10775-008-9135-y
- Cardoso, P., & Moreira, J. M. (2009). Self-efficacy beliefs and the relation between career planning and perception of barriers. *International Journal for Educational and Vocational Guidance*, 9(3), 177-188. doi: 10.1007/s10775-009-9163-2
- Cochran, L. (1994). What is a career problem? *The Career Development Quarterly*, 42, 204-215. doi: 10.1002/j.2161-0045.1994.tb00935.x
- Coon, K. L. (2008). *Predicting career decision-making difficulties among undergraduate students: the role of career decision making self efficacy, career optimism and coping*. Doctoral dissertation, Southern Illinois University Carbondale Institute of Educational Sciences, Illinois.

- Creed, P. A., Patton, W., & Watson, M. B. (2002). Cross-cultural equivalence of the career decision-making self-efficacy scale-short form: An Australian and South African comparison. *Journal of Career Assessment, 10*(3), 327-342. doi: 10.1177/10672702010003004
- Creed, P., Prideaux, L. A., & Patton, W. (2005). Antecedents and consequences of career decisional states in adolescence. *Journal of Vocational Behavior, 67*(3), 397-412. doi: 10.1016/j.jvb.2004.08.008
- Creed, P. A., & Yin, W. O. (2006). Reliability and validity of a Chinese version of the Career Decision-Making Difficulties Questionnaire. *International Journal for Educational and Vocational Guidance, 6*(1), 47-63. doi: 10.1007/s10775-006-0003-3
- Di Fabio, A., Palazzeschi, L., & Bar-On, R. (2012). The role of personality traits, core self-evaluation, and emotional intelligence in career decision-making difficulties. *Journal of Employment Counseling, 49*(3), 118-129. doi: 10.1002/j.2161-1920.2012.00012.x
- Di Fabio, A., Palazzeschi, L., Asulin-Peretz, L., & Gati, I. (2013). Career indecision versus indecisiveness: Associations with personality traits and emotional intelligence. *Journal of Career Assessment, 21*(1), 42-56, doi: 10.1177/1069072712454698
- Dursun, A., & Kara, A. (2019). Ortaöğretim öğrencilerinde kariyer karar verme güçlüklerinin yordayıcısı olarak kariyer kararı yetkinlik beklentisi ve kariyer seçiminde aile etkisi. *Journal of Turkish Educational Sciences, 17*(1), 39-55. Retrieved from <https://dergipark.org.tr/tr/download/article-file/744028>
- Farrow, C. (2016). *Career decision-making patterns of college students with high functioning autism spectrum disorders, learning disabilities, and college students without disabilities*. Doctoral dissertation, Faculty of the Graduate School of The University at Buffalo, State University of New York.
- Fuqua, D. R., & Hartman, B. W. (1983). Differential diagnosis and treatment of career indecision. *Journal of Counseling & Development, 62*(1), 27-29. doi: 10.1111/j.2164-4918.1983.tb00112.x
- Gati, I., Kleiman, T., Saka, N., & Zakai, A. (2003). Perceived benefits of using an internet-based interactive career planning system. *Journal of Vocational Behavior, 62*(2), 272-286. doi: 10.1016/S0001-8791(02)00049-0
- Gati, I., Krausz, M., & Osipow, S. H. (1996). A taxonomy of difficulties in career decision making. *Journal of Counseling Psychology, 43*(4), 510-526. Retrieved from https://www.researchgate.net/publication/232449197_A_Taxonomy_of_Difficulties_in_Career_Decision_Making
- Gati, I., Ryzhik, T., & Vertsberger, D. (2013). Preparing young veterans for civilian life: The effects of a workshop on career decision-making difficulties and self-efficacy. *Journal of Vocational Behavior, 83*(3), 373-385. doi: 10.1016/j.jvb.2013.06.001
- Gati, I., & Saka, N. (2001). High school students' career-related decision-making difficulties. *Journal of Counseling & Development, 79*(3), 331-340. doi: <https://doi.org/10.1002/j.1556-6676.2001.tb01978.x>
- Gökçe, Z., & Traş, Z. (2017). Lise öğrencilerinin kariyer karar verme güçlükleri ve ego kimlik statülerinin bazı değişkenlere göre incelenmesi. *Journal of Turkish Educational Sciences, 15*(1), 58-69. Retrieved from <https://dergipark.org.tr/tr/download/article-file/314861>
- Guay, F., Ratelle, C. F., Senécal, C., Larose, S., & Deschênes, A. (2006). Distinguishing developmental from chronic career indecision: Self-efficacy, autonomy, and social support. *Journal of Career Assessment, 14*(2), 235-251. doi: 10.1177/1069072705283975
- Hamamcı, Z., Bacanlı, F., & Doğan, H. (2013). İlköğretim ortaöğretim ve üniversite öğrencilerinin mesleki ve eğitsel kararlarını etkileyen faktörlerin incelenmesi. *Elektronik Sosyal Bilimler Dergisi, 12*(44), (284-299). Retrieved from <https://dergipark.org.tr/tr/download/article-file/70449>

- Hijazi, Y., Tatar, M., & Gati, I. (2004). Career decision-making difficulties among Israeli and Palestinian Arab high-school seniors. *Professional School Counseling, 8*(1), 64-72. Retrieved from <https://www.jstor.org/stable/pdf/42732416.pdf>
- Hirschi, A., Niles, S. G., & Akos, P. (2011). Engagement in adolescent career preparation: Social support, personality and the development of choice decidedness and congruence. *Journal of Adolescence, 34*(1), 173-182. doi: 10.1016/j.adolescence.2009.12.009
- Işık, E. (2013). Mesleki sonuç beklentisinin yordayıcıları olarak algılanan sosyal destek ve denetim odağı. *Kuram ve Uygulamada Eğitim Bilimleri, 13*(3), 1419-1430. doi: 10.12738/estp.2013.3.1520
- Jaensch, V. K., Hirschi, A., & Freund, P. A. (2015). Persistent career indecision over time: Links with personality, barriers, self-efficacy, and life satisfaction. *Journal of Vocational Behavior, 91*, 122-133. doi: 10.1016/j.jvb.2015.09.010
- Jemini-Gashi, L., Duraku, Z. H., & Kelmendi, K. (2019). Associations between social support, career self-efficacy, and career indecision among youth. *Current Psychology, 1-7*. doi: 10.1007/s12144-019-00402-x
- Jepsen, D.A. (1984). The developmental perspective on vocational behavior: A review of theory and research. In S.D. Brown, & R.W. Lent (Eds.), *Handbook of counseling psychology* (pp. 178-215). New York: Wiley.
- Jiang, Z. (2016). Emotional intelligence and career decision-making self-efficacy: Mediating roles of goal commitment and professional commitment. *Journal of Employment Counseling, 53*(1), 30-47. doi: 10.1002/joec.12026
- Kelly, R. R., & Hatcher, T. (2013). Decision-making self-efficacy and barriers in career decision making among community college students. *Community College Journal of Research and Practice, 37*(2), 103-113. doi: 10.1080/10668926.2011.585114
- Kırdök, O. (2010). *Bilişsel bilgiyi işleme yaklaşımına göre geliştirilen mesleki karar verme programının sınanması*. Doctoral dissertation, Çukurova University, Adana.
- Kırdök, O., & Korkmaz, O. (2018). Dimensions of personality and emotional intelligence as predictors of high school students' career decision difficulties. *Educational Research and Reviews, 13*(12), doi: 10.5897/ERR2018.3532
- Kim, S. Y., Ahn, T., & Fouad, N. (2016). Family influence on Korean students' career decisions: A social cognitive perspective. *Journal of Career Assessment, 24*(3), 513-526. doi: 10.1177/1069072715599403
- Lam, M. C. K. (2016). *Effects of a career course on students' career decision-making self-efficacy, indecision and difficulties*. Doctoral dissertation, University of Nottingham Malaysia Campus.
- Lam, M., & Santos, A. (2018). The impact of a college career intervention program on career decision self-efficacy, career indecision, and decision-making difficulties. *Journal of Career Assessment, 26*(3), 425-444. doi: 10.1177/1069072717714539
- Lancaster, B. P., RudoLRh, C. E., Perkins, T. S., & Patten, T. G. (1999). The reliability and validity of the Career Decision Difficulties Questionnaire. *Journal of Career Assessment, 7*(4), 393-413. doi: 10.1177/106907279900700405
- Leal-Muniz, V., & Constantine, M. G. (2005). Predictors of the career commitment process in Mexican American college students. *Journal of Career Assessment, 13*(2), 204-215. doi: 10.1177/1069072704273164
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology, 47*(1), 36-49. doi: 10.1037//0022-0167.47.1.36
- Li, X., Wang, Y. W., & Kim, Y. H. (2020). The moderation of parental support on the relationship between race-related career barriers and academic achievement. *Journal of Career Development, 1-15*. doi: 10.1177/0894845320937353

- Luzzo, D. A. (1993). Ethnic differences in college students' perceptions of barriers to career development. *Journal of Multicultural Counseling and Development, 21*(4), 227-236. doi: 10.1002/j.2161-1912.1993.tb00233.x
- Luzzo, D. A. (1995). Gender differences in college students' career maturity and perceived barriers in career development. *Journal of Counseling & Development, 73*(3), 319-322. doi: 10.1002/j.1556-6676.1995.tb01756.x
- Luzzo, D. A. (1996). Exploring the relationship between the perception of occupational barriers and career development. *Journal of Career Development, 22*(4), 239-248. doi: 10.1177/089484539602200402
- Mau, W. C. J. (2001). Assessing career decision-making difficulties: A cross-cultural study. *Journal of Career Assessment, 9*(4), 353-364. doi: 10.1177/106907270100900403
- McWhirter, E. H. (1997). Perceived barriers to education and career: Ethnic and gender differences. *Journal of Vocational Behavior, 50*(1), 124-140. doi: 10.1006/jvbe.1995.1536
- Mejia-Smith, B., & Gushue, G. V. (2017). Latina/o college students' perceptions of career barriers: Influence of ethnic identity, acculturation, and self-efficacy. *Journal of Counseling & Development, 95*(2), 145-155. doi: doi.org/10.1002/jcad.12127
- Metheny, J., & Mcwhirter, E. H. (2013). Contributions of social status and family support to college students' career decision self-efficacy and outcome expectations. *Journal of Career Assessment, 21*(3), 378-394. doi: 10.1177/1069072712475164
- Morgan, T., & Ness, D. (2003). Career decision-making difficulties of first-year students. *The Canadian Journal of Career Development, 2*(1), 33-39. Retrieved from <http://cjcdonline.ca/wp-content/uploads/2014/11/Career-Decision-Making-Difficulties-of.pdf>
- Mutlu, T. (2011). *Lise öğrencilerinde kariyer kararı verme güçlükleri*. Master's thesis, Hacettepe University, Ankara.
- Newman, J. L., Gray, E. A., & Fuqua, D. R. (1999). The relation of career indecision to personality dimensions of the California Psychological Inventory. *Journal of Vocational Behavior, 54*(1), 174-187. doi: 10.1006/jvbe.1998.1656
- Nota, L., Ferrari, L., Solberg, V. S. H., & Soresi, S. (2007). Career search self-efficacy, family support, and career indecision with Italian youth. *Journal of Career Assessment, 15*(2), 181-193. doi: 10.1177/1069072706298019
- Öztemel, K. (2012). Kariyer kararsızlığı ile mesleki karar verme öz yetkinlik ve kontrol odağı arasındaki ilişkiler. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi, 32*(2), 459-477. Retrieved from <http://www.gefad.gazi.edu.tr/tr/download/article-file/76952>
- Öztemel, K. (2014). Duygusal ve kişilik ilişkili kariyer karar verme güçlükleri ölçeği'nin kısa formu. *Türk Psikolojik Danışma ve Rehberlik Dergisi, 5*(42), 244-255. Retrieved from <http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=0&sid=df933b11-8653-4e7f-b4ec-b1bc7298b19f%40sdc-v-sessmgr03>
- Özyürek, R. (2013). Sosyal-bilişsel yaklaşımlar. B. Yeşilyaprak (Ed.). In *Mesleki rehberlik ve kariyer danışmanlığı* (pp. 220-271). Ankara: Pegem.
- Page, J., Bruch, M. A., & Haase, R. F. (2008). Role of perfectionism and five-factor model traits in career indecision. *Personality and Individual Differences, 45*(8), 811-815. doi: 10.1016/j.paid.2008.08.013
- Patton, W., Creed, P. A., & Watson, M. (2003). Perceived work related and non-work related barriers in the career development of Australian and South African adolescents. *Australian Journal of Psychology, 55*(2), 74-82. doi: 10.1080/00049530412331312924
- Penn, L.T., & Lent, R. W. (2019). The joint roles of career decision self-efficacy and personality traits in the prediction of career decidedness and decisional difficulty. *Journal of Career Assessment, 27*(3), 457-470. doi: 10.1177/1069072718758296
- Pulliam, N., Ieva, K. P., & Burlew, L. (2017). The relationship between perceived career barriers and career decision self-efficacy on initial career choice among low-income, first generation, pre-freshman, college-bound

- students. *Journal of College Access*, 3(2), 78-97. Retrieved from <https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1058&context=jca>
- Quimby, J. L., & O'Brien, K. M. (2004). Predictors of student and career decision-making self-efficacy among nontraditional college women. *The Career Development Quarterly*, 52(4), 323-339. doi: 10.1002/j.2161-0045.2004.tb00949.x
- Reese, R. J., & Miller, C. D. (2006). Effects of a university career development course on career decision-making self-efficacy. *Journal of Career Assessment*, 14(2), 252-266. doi: 10.1177/1069072705274985
- Saka, N., Gati, I., & Kelly, K. R. (2008). Emotional and personality-related aspects of career-decision-making difficulties. *Journal of Career Assessment*, 16(4), 403-424. doi: 10.1177/1069072708318900
- Santos, A., Wang, W., & Lewis, J. (2018). Emotional intelligence and career decision-making difficulties: The mediating role of career decision self-efficacy. *Journal of Vocational Behavior*, 107, 295-309. doi: 10.1016/j.jvb.2018.05.008
- Sauermann, H. (2005). Vocational choice: A decision making perspective. *Journal of Vocational Behavior*, 66(2), 273-303. doi: 10.1016/j.jvb.2004.10.001
- Storme, M., & Celik, P. (2017). Career exploration and career decision-making difficulties: The moderating role of creative self-efficacy. *Journal of Career Assessment*, 26(3), 445-456. doi: 10.1177/1069072717714540
- Storme, M., Celik, P., & Myszkowski, N. (2019). Career decision ambiguity tolerance and career decision-making difficulties in a French sample: The mediating role of career decision self-efficacy. *Journal of Career Assessment*, 27(2), 273-288. doi: 10.1177/1069072717748958
- Stringer, K. J., & Kerpelman, J. L. (2010). Career identity development in college students: Decision making, parental support, and work experience. *An International Journal of Theory and Research*, 10(3), 181-200. doi: 10.1080/15283488.2010.496102
- Sürücü, M. (2011). *Mesleki seçim hedeflerinin kariyer engelleri ve sosyal bilişsel değişkenler tarafından yordanmasına ilişkin bir model sınaması*. Doctoral dissertation, Gazi University, Ankara.
- Swank, J. M., & Jahn, S. A. (2018). Using sand tray to facilitate college students' career decision-making: A qualitative inquiry. *The Career Development Quarterly*, 66(3), 269-278. doi: 10.1002/cdq.12148
- Swanson, J. L., & Woitke, M. B. (1997). Theory into practice in career assessment for women: Assessment and interventions regarding perceived career barriers. *Journal of Career Assessment*, 5(4), 443-462. doi: 10.1177/106907279700500405
- Sweeney, M. L., & Schill, T. R. (1998). The association between self-defeating personality characteristics, career indecision, and vocational identity. *Journal of Career Assessment*, 6(1), 69-81. doi: 10.1177/106907279800600105
- Şekerli, B. (2016). *Ortaokul 8. Sınıf öğrencilerinin kariyer karar verme güçlükleri ile kariyer gelişimleri ve benlik saygıları arasındaki ilişkilerin incelenmesi*. Master's thesis, Gazi University, Ankara.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, 22(1), 63-81. doi: 10.1016/0001-8791(83)90006-4
- Tien, H. L. S. (2001). Career decision-making difficulties perceived by college students in Taiwan. *Bulletin of Educational Psychology*, 33(1), 87-98. Retrieved from https://www.researchgate.net/profile/Hsiu-Lan-Shelley-Tien/publication/242093244_Career_Decision_Making_Difficulties_Perceived_by_College_Students_in_Taiwan/links/0c9605357a35e306ed000000/Career-Decision-Making-Difficulties-Perceived-by-College-Students-in-Taiwan.pdf
- Tien, H. L. S. (2005). The validation of the career decision-making difficulties scale in a Chinese culture. *Journal of Career Assessment*, 13(1), 114-127. doi: 10.1177/1069072704270327

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- Ukil, M. I. (2016). Career barriers to career indecision: a final-year BBA students view. *Polish Journal of Management Studies, 13*(1), 192-205. doi: 10.17512/pjms.2016.13.1.18
- Vahedi, S., Farrokhi, F., Mahdavi, A., & Moradi, S. (2012). Exploratory and confirmatory factor analysis of the career decision-making difficulties questionnaire. *Iranian journal of psychiatry, 7*(2), 74-81. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3428641/>
- Vaiopoulou, J., Papavassiliou-Alexiou, I., & Stamovlasis, D. (2019). Career decision-making difficulties and decision statuses among Greek student teachers. *Hellenic Journal of Psychology, 16*, 74-94. Retrieved from https://pseve.org/wp-content/uploads/2019/04/Volume16_Issue1_Julie_Vaiopoulou.pdf
- van Vianen, A. E., De Pater, I. E., & Preenen, P. T. (2009). Adaptable careers: Maximizing less and exploring more. *The Career Development Quarterly, 57*(4), 298-309. doi: 10.1002/j.2161-0045.2009.tb00115.x
- Vertsberger, D., ve Gati, I. (2016). Career decision-making difficulties and heLR-seeking among Israeli young adults. *Journal of Career Development, 43*(2), 145-159. doi: 10.1177/0894845315584162
- Walker, T. L., & Tracey, T. J. (2012). The role of future time perspective in career decision-making. *Journal of Vocational Behavior, 81*(2), 150-158. doi: 10.1016/j.jvb.2012.06.002
- Xu, H., & Tracey, T. J. (2014). Ambiguity tolerance with career indecision: An examination of the mediation effect of career decision-making self-efficacy. *Journal of Career Assessment, 1*-14. doi:10.1177/1069072714553073
- Yang, W., & Shi, L. (2018). The empirical analysis about effects of career decision-making difficulties on the career decision status in college students. In 8th International Conference on Management, Education and Information (pp.671-677). Shenyang.

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Author Contributions

Both authors substantially contributed to this work in each step of the study.

Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

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Ethical Statement

The ethics committee of Gazi University was consulted for ethical approval of this study. With the document dated 14.05.2018 and numbered E.76235, it was decided that the study was ethically appropriate. The participants were informed of the goals of the study and they were told that their identities would be kept confidential.

RESEARCH

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ARAŞTIRMA

Açık Erişim

The Relationship Between Psychological Resilience and Perceived Stress in Adults: The Mediating Role of General Self Efficacy

Yetişkinlerde Psikolojik Sağlamlık ile Algılanan Stres Arasındaki İlişki: Genel Öz Yeterliğin Aracı Rolü

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ABSTRACT

In this study, it was aimed to examine the mediating role of general self efficacy in the relationship between psychological resilience and perceived stress of adult individuals. The participants of the study are 634 people, 362 women and 272 men, aged between 18 and 72. SPSS PROCESS macro plug-in was used to test the hypotheses using the data collected in the research and conditional process analysis was performed. Apart from this, the significance of the mediator variable was made using the bootstrapping method, which is considered a more modern approach today. First, Pearson product-moment correlation coefficient was calculated to determine the relationship between variables, and it was found that there were significant relationships between psychological resilience, both with perceived stress and general self efficacy. In addition, a significant relationship was found between perceived stress and general self efficacy. General self efficacy was found to have a significant partial mediating role in the relationship between psychological resilience and perceived stress. The fact that the mediating role of general self efficacy in the relationship between psychological resilience and perceived stress has not been examined in the literature is considered important for this study. All the findings obtained in this direction were discussed with similar studies in the light of the literature and some suggestions were made.

Article Information

Keywords

Psychological Resilience
Perceived Stress
General Self Efficacy
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ÖZET

Bu çalışmada, yetişkin bireylerin psikolojik sağlamlıkları ile algılanan stresleri arasındaki ilişkide genel öz yeterliğin aracı rolünün incelenmesi amaçlanmıştır. Araştırmanın katılımcıları, yaşları 18 ile 72 arasında değişen 362'si kadın ve 272'si erkek olmak üzere toplam 634 kişidir. Araştırmada toplanan veriler kullanılarak hipotezleri test etmek amacıyla SPSS PROCESS makro eklentisi kullanılmış ve koşullu süreç analizi yapılmıştır. Bunun dışında aracı değişkenin anlamlılığı günümüzde daha modern bir yaklaşım olarak görülen bootstrapping yöntemi kullanılarak yapılmıştır. Öncelikle değişkenler arasındaki ilişkiyi belirlemek için Pearson momentler çarpımı korelasyon katsayısı hesaplanmış ve psikolojik sağlamlığın hem algılanan stres ile arasında hem de genel öz yeterlik ile arasında anlamlı ilişkiler olduğu görülmüştür. Ayrıca algılanan stres ile genel öz yeterlik arasında da anlamlı bir ilişki olduğu saptanmıştır. Genel öz yeterliğin psikolojik sağlamlık ile algılanan stres arasındaki ilişkide anlamlı şekilde kısmi aracı role sahip olduğu belirlenmiştir. Psikolojik sağlamlık ile algılanan stres arasındaki ilişkide genel öz yeterliğin aracı rolünün alanyazında incelenmemiş olması bu araştırma için önemli görülmektedir. Bu doğrultuda elde edilen tüm bulgular, benzer çalışmalar ile alanyazın ışığında tartışılmış ve bazı öneriler sunulmuştur.

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Ethical Statement: This research has been reviewed and given permission by the Marmara University Scientific Research and Publications Ethics Committee.

INTRODUCTION

While the literature on psychology and psychological counseling had generally focused on the problems and negativities present in individuals' lives through the modernist perspective until the end of the 20th century, emphasis under the influence of postmodernist thought in the 21st century has been made on individuals' strengths, potential, coping ability, emotions and personality traits through positive psychology. Positive psychology both reveals individuals' potential as well as shows them their strengths (Seligman & Csikszentmihalyi, 2000). Gable and Haidt (2005) also stated the aim of positive psychology to be having individuals be aware of positive life events. Positive psychology, which dates back to ancient times, is seen to have been studied much more in the last 20 years in particular. These studies frequently feature the concept of psychological resilience, one of the concepts of positive psychology.

Being a popular concept of positive psychology in recent years, psychological resilience is defined as individuals' ability to adapt to the negative life events they encounter by overcoming them and going back to living healthily (Kararmak, 2006). Another definition in the literature explains psychological resilience as adapting to the stressful and challenging events that occur in life by successfully coping with them (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003). Gizir and Aydın (2006) stated psychological resilience to be the way individuals use protective factors to cope with the bad situations that emerge due to risk factors. When looking at the literature, even though many definitions have been made in regard to psychological resilience, three basic points are mentioned in the definitions: (1) risk factors or life challenges, (2) protective factors or coping skill, and (3) positive outcomes (Davydov, Stewart, Ritchie, & Chaudieu, 2010; Luthar, Cicchetti, & Becker, 2000; Öz & Bahadır-Yılmaz, 2009). These three common points can briefly be expressed as individuals having a negative experience, having the resources for coping with it, and their ability to adapt in this process.

Both personality traits and environmental factors play a significant role in whether individuals have high or low psychological resilience. The combination of personality traits and environmental factors has been identified in the literature to make up individuals' level of psychological resilience (Fraser, Richman, & Galinsky, 1999). Just as an individual's temperament affects their psychological resilience, so does their life experience determines the level of psychological resilience. The risk factors impacting individuals' psychological resilience include factors such as loss, crowded family life, stressful work or school environment, experiencing natural disaster, war, and direct or indirect exposure to a terrorist attack and reasons such as chronic/terminal illnesses, premature birth, neglect, abuse, lack of social skills academic failure, substance abuse, moving, or migrating (Gizir, 2007; Kararmak, 2006; Tugade & Frederickson, 2004). Certain protective factors have been mentioned in the literature for being able to cope with these risk factors (Baird, Lucas, & Donnellan, 2010; Campbell-Sills, Cohan, & Stein, 2006; Doğan, 2016; Eryılmaz, 2012); these have been identified as self-confidence, self-respect, self efficacy, flexibility, adaptability, sensitivity, intellectuality, strong interpersonal relations, autonomy, high awareness, academic success, having a sense of humor, having social skills, being hopeful and optimistic, having high religious beliefs, having positive expectations of the future, having supportive parents, having sincere relations with family and immediate surroundings, belonging to a close group of friends, being able to maintain friendships, and being a volunteer at an organization that benefits society. Preventing these risk factors and increasing these protective factors facilitates individuals' ability to cope quickly with back-breaking or stressful life events and to have a healthy adjustment process (Fergus & Zimmerman, 2005; Kirca & Saruhan, 2020). Similarly, the fact that Wang and Zhang (2015) mention emphasizing individuals'

strengths instead of negative and stressful situations reveals the importance of protective factors. In summary, protective factors can be said to function as a buffer against risk factors in people's lives.

Psychological resilience is a character trait that can be learned and developed. Accordingly, individuals can be said to possess a certain responsibility in having high or low psychological resilience. Individuals who are not resilient psychologically are found to have problems such as low self efficacy and inability to adapt to life (Kunseler, Oosterman, de Moor, Verhage, & Schuengel, 2016), getting frazzled and experiencing burnout due to stressful life events (Yörük, 2019), being isolated by not being able to communicate with one's social environment and continuing life with low motivation (Eraslan-Çapan & Arıcıoğlu, 2014), and experiencing problems such as having weak family relations and substance abuse (Gizir, 2007). Other studies that have been performed observed having high psychological resilience to play a decisive role in people being happier and having higher life satisfaction (Doğan, 2015; Short, Barnes, Carson, & Platt, 2020). Similarly, individuals with high psychological resilience have been identified as having beliefs and positive feelings about life (Atarbay, 2017), high levels of optimism (Orth & Robins, 2014; Parmaksız, 2020), social support (Kobau et al., 2011), high self-esteem (Kararımak & Siviş-Çetinkaya, 2011; Renati, Bonfiglio, & Pfeiffer, 2016), and sufficient levels of self efficacy (Benard, 2004; Drapeau, Saint-Jacques, Le'pine, Be'gin, & Bernard, 2007; Terzi, 2006). These findings obtained in many studies also carry significance for the model being established in the current research being conducted. Apart from this, studies are also encountered in the literature showing psychological resilience to also have an impact on individuals' state of stress (Calvete, Orue, & Hankin, 2014; Connor & Davidson, 2003; Turgut, 2015). These results obtained on the relationship between the stress individuals perceive and psychological resilience levels are also seen as important for the model being established.

The state of stress, which can be expressed as a risk factor for psychological resilience, is a reality present in individuals' lives. Stress, which challenges us in all areas of life, is defined as a phenomenon that occurs as a result of the changes individuals experience and creates a state of tension by threatening the individual both physically and psychologically (Greenberg, 2011). The literature contains many different definitions about the concept of stress. The common point that can be drawn from these definitions is that individuals experiencing stress are both physically and psychologically stressed by giving internal reactions and experience problems adapting to their environment as a result of these tensions (Durna, 2006). Performed studies have emphasized the need for individuals to be psychologically resilient in order to overcome the stressful events encountered in life and the problems adapting in this process (Özyıldırım, 2015). Individuals with high psychological resilience have been mentioned in the literature to also cope better with stressful situations and to be able to more easily get challenging life events under control (de Terte & Stephens, 2014; Jacelon, 1997). This finding indicates a relationship to exist between individuals' psychological resilience and the stress they experience.

Apart from low levels of psychological resilience, other factors have also been mentioned to trigger the stress present in people's lives. Having low self-confidence (Üstün & Bayar, 2015) and low self efficacy (Chen et al., 2020; Göger & Çevirme, 2019) are seen as other factors impacting stress. When examining these factors, researchers are seen to conduct studies on the many factors affecting stress. In particular, much research is encountered both in Turkey and abroad showing the impact having low self efficacy has on individuals' stress (Bandura, 2006; Choi, Kluemoer, & Sauley, 2013; Jimmieson, 2000; Newby-Fraser & Schlebusch, 1997; Sahranç, 2007). These research findings have shown self efficacy to be an important variable in coping with the stressful situations people experience.

The variable of self efficacy, which appears to be related to individuals' stress levels as well as psychological resilience, is thought to also be able to have a mediating effect on the relationship between psychological resilience and perceived stress. The concept of self efficacy, whose importance is seen in this regard, is expressed as an individual's awareness of their own ability and self-confidence on any topic (Bandura, 1986). Another definition describes self efficacy as an individual's ability to plan for arriving at their goals and possessing specific beliefs on this matter by knowing their own competencies and potential (Luszczynska, Scholz, & Schwarzer, 2005; Yıldırım & İlhan, 2010). Based on these definitions, an individual's belief in their potential and competencies rather than their abilities explains the concept of self efficacy.

Considering that the concept of self efficacy to be generalizable by not addressing just one area in an individual's life has allowed the concept of general self efficacy to emerge (Aypay, 2010; Scherbaum, Cohen-Charash, & Kern, 2006). Although many definitions occur in the literature on general self efficacy, it is in short defined as the belief individuals carry regarding trusting their self-potential in all areas and their ability to cope with stressful life events (Chen, Gully, & Eden, 2004). These definitions show general self efficacy to allow individuals to be addressed in a wider scope over their behaviors.

When examining the literature, research results are encountered showing individuals to need general self efficacy for coping with stressful life events (Luszczynska, Gutiérrez-Doña, & Schwarzer, 2005; Tong & Shanggui, 2004). Other studies are found in the literature to show strong self efficacy belief to be able to impact coping with challenging and stressful situations in life (Cziraki, Read, Laschinger, & Wong, 2018; Diehl & Hay, 2010). When considering that each stressful life event is a risk factor, general self efficacy is considered able have an impact on individuals being psychologically resilient. Many studies in both the domestic and international literature support this idea (Can & Cantez, 2018; Kılıç, Mammadov, Koçhan, & Aypay, 2018; Scholz, Gutiérrez-Doña, Sud, & Schwarzer, 2002). All the findings obtained in these studies prove general self efficacy and psychological resilience to have an effect on individuals' perceived stress levels. Bandura (1977) stated individuals with high general efficacy to try to succeed again by getting back on their feet when they are unsuccessful. This situation is consistent with the characteristics that are defined for people with high psychological resilience.

In the literature review, the concepts of psychological resilience, perceived stress, and general self efficacy are seen to have been generally studied with high school or university students (Akhunlar-Turgut, Sariot-Ertürk, Karşlı, & Şakiroğlu, 2018; Neff & McGehee, 2010; Pehlivan, 2019; Steinberg, 2007). At the same time, the studies in the literature review examining the perceived stress levels or psychological resilience of adult individuals are noted to few in number both abroad and in Turkey (Bonanno, 2004). Apart from this, examining not just children's and adolescents' but all individuals' psychological resilience levels and perceived stress levels is considered necessary due to the COVID-19 virus that has shown serious effects both in Turkey and in other countries. Considering all these reasons, the sample of the research has been identified as adult individuals.

Individuals possessing psychological resilience, namely the belief that they can cope psychologically with the restrictive epidemic period we are in, is thought to play a significant role in how they cope with the stress they perceive. This research is considered to be important as it presents findings that are considered notable for being able to increase individuals' psychological resilience levels and general self efficacy level and to keep their perceived stress levels under control during this pandemic within which we are found. Even though the relationship the three variables addressed in this research are seen to have been

examined in the literature binarily, no research is encountered to have addressed these three variables together. Based on this rationale, this study is believed to be able to contribute to the field of psychological counseling and guidance.

The aim of this research is to examine the mediating role general self efficacy has on the relationship between adult individuals' psychological resilience and their levels of perceived stress. A hypothetical model has been established in line with this objective. The perceived stress levels in this established model are thought to affect psychological resilience directly and general self efficacy indirectly.

The Study's Basic Hypotheses

The model tested in line with the aim of the research is presented in Figure 1:

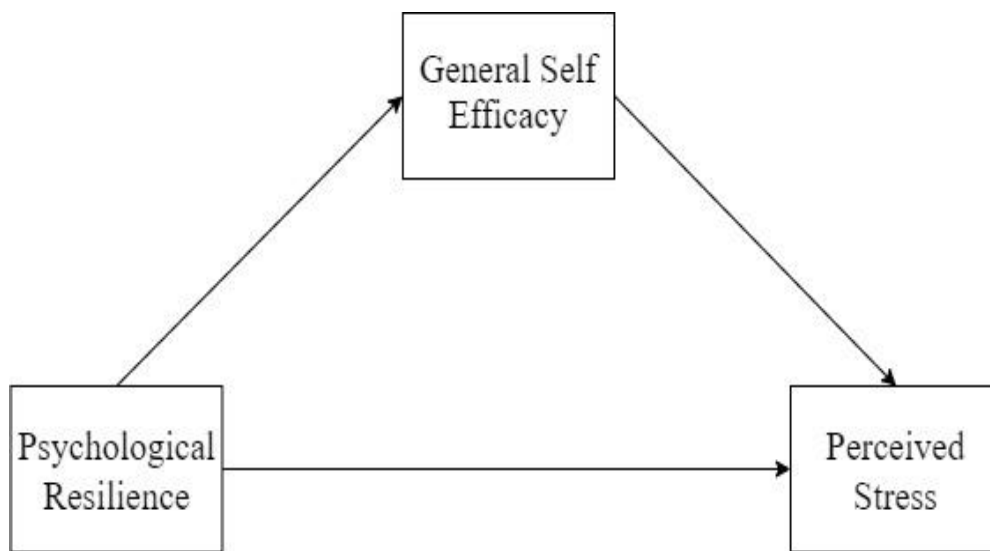


Figure 1. The suggested conceptual model for the mediating role of general self efficacy in the relationship between psychological resilience and perceived stress

The following hypotheses have been determined with the aim of testing the model shown in Figure 1:

H1: Statistically significant relationships are found between the variables of both perceived stress and general self efficacy by means of the variable of psychological resilience.

H2: Psychological resilience significantly predicts the variable of perceived stress.

H3: Psychological resilience significantly predicts general self efficacy, and the variable of general self efficacy also significantly predicts perceived stress.

H4: General self efficacy has a mediating role on the relationship between the variables of psychological resilience and perceived stress.

METHOD

Research Model

This research is a descriptive study based on the relational screening model and examines the mediating role general self efficacy has on the relationship between the participants' levels of perceived stress and

psychological resilience. The relational screening model is used for predicting the relationships among the variables (Burmaoğlu, Polat, & Meydan, 2013). The predicting variable (X) of the study is psychological resilience, the predicted variable (Y) is perceived stress, and the mediating variable (M) is general self efficacy.

Participants of the Research

The study group in this research is composed of individuals over the age of 18. Of the total of 634 participants between the ages of 18 and 72, 362 are female (57.1%) and 272 are male (42.9%). The average age of the participants has been calculated as 29.71. The performed analyses have determined the sample to consist of many different occupational groups.

Ethical Statement

The study's ethics committee approval was obtained from the Marmara University Scientific Research and Publications Ethics Committee on July 23, 2020 (Board Approval #2000223550/2020-7-16). The consent form was obtained from all participants indicating that they voluntarily participated in this study.

Data Collection Tools

Personal Information Form. In this study, a personal information form prepared by the researchers is used in order to determine the demographic characteristics of the sample and to define the study group better. This form requests information about gender, age and profession from the participants.

Brief Psychological Resilience Scale. The research uses the Brief Resilience Scale, developed by Smith et al. (2008) and adapted to Turkish by Doğan (2015), for the purpose of determining the participants' levels of psychological resilience. This scale, scored as a 5-point Likert type, is a one-dimensional scale composed of six items. Additionally, the scale has items that are reverse scored. High scores received on the scale after converting the reverse-scored items show the participants to have high levels of psychological resilience. The fit indices obtained as a result of the performed confirmatory factor analysis are seen to be sufficient. Cronbach's alpha had been calculated for the purpose of determining whether the scale is reliable or not and was found to be .83. Cronbach's alpha obtained in regard to the study group included in this research has been calculated as .84.

Perceived Stress Scale. Cohen, Kamarck, and Mermelstein (1983) developed the Perceived Stress Scale to determine participants' level of stress when they experience it in their lives. This scale's adaptation to Turkish was carried out by Eskin, Harlak, Demirkiran, and Dereboy (2013). Although the original scale has 14 items, the form adapted to Turkish has 10 items. As a result of the component analysis, a two-component structure with eigenvalues greater than 1 has been determined. In other words, the scale has two sub-dimensions. This scale is scored as a 5-point Likert type between 0 (never) and 4 (very often) with the lowest and highest scores able to be obtained from the scale being 0 and 40, respectively. Receiving high scores on the scale indicate participants have high levels of perceived stress. In the Cronbach alpha test performed for the scales' reliability, the internal consistency coefficient was reported as .82. The value of Cronbach's alpha of internal consistency in this study has been calculated as .83.

General Self Efficacy Scale. Although the scale, developed by Schwarzer and Jerusalem (1995) for measuring participants' ability to cope with new and difficult affairs, initially consisted of 20 items, it has been reduced to 10 items as a result of modifications. Aypay (2010) adapted this scale to Turkish and Turkish culture. The scale contains no reverse-scored items; it is scored as a 4-point Likert-type with two

sub-dimensions. The lowest and highest scores obtainable on the scale are 10 and 40, respectively. Obtaining high scores means individuals have sufficient self efficacy. For testing the reliability analysis of the scale, the test-retest reliability was reported as .80 and the Cronbach alpha of internal consistency as .83. In line with the measurements obtained from the participants, this study has determined the Cronbach alpha of internal consistency to be .84.

Data Collection

In order to carry out the research, the necessary permissions were obtained to measure the variables in the research by contacting the owners of the scale. The data of the study were collected using the easy sampling method on Google Forms due to the Covid-19 epidemic process in the second half of 2020. Then the collected research data were transferred to the computer environment.

Data Analysis

Preliminary preparations have been for being able to perform the statistical analyses of the data collected within the scope of the study. First whether or not improper or incomplete markings were present in the data set and extreme values were examined using the frequency table. In the data collected from a total of 681 adults in total, seven measurement data set were removed that were incomplete or incorrectly marked. Next, Mahalanobis distance values were calculated for the remaining 674 adults. By taking into account the significance level of .001 as stated in the literature (Büyüköztürk, 2016; Gürbüz, 2019), 40 more measurements with extreme values were removed from the data set, and the data set was formed with a total of 634 participants. Lastly, whether or not the variables had multicollinearity issues was also checked using the assumptions of normality and linearity. The values were determined to be within range (± 1.96) by looking at the skewness and kurtosis coefficients of each variable, and the null hypothesis is seen to be rejected (Kolmogorov Smirnov $p \geq .05$). These obtained findings indicate the data to show normal distribution. Apart from this, after seeing no problem to exist related to multicollinearity, the data analyses were begun.

The data analyses were started by calculating the descriptive statistics and internal consistency coefficients for each variable. The relationships among psychological resilience, perceived stress, and general self efficacy have been reported by calculating the Pearson product-moment correlation coefficient. Afterward, the PROCESS macro plug-in for SPSS developed by Hayes (2018) was used for testing the research hypotheses, and the conditional process analysis was performed. Conditional process analysis is expressed as a mediation model based in the literature on regression analysis and is an analysis that resembles multiple regression analysis and examines the level at which the relationships present among the variables are explained with respect to the established model (Gürbüz, 2019). Totan (2013) stated that mediation analysis should be used to test theoretical models. According to Gürbüz (2019), how the relationship between the predictor and predicted variables emerge is explained by the mediation effect. The predictor (independent) variable in this study is psychological resilience, the predicted (dependent) variable is perceived stress, and the mediating variable is general self efficacy.

Researchers, due to considering Baron and Kenny's (1986) method used in mediation analysis as a traditional but not very strong method, recommend the use of conditional process analysis, which is more contemporary these days and provides reliable results (Darlington & Hayes, 2017; Gürbüz, 2019; Hayes & Rockwood, 2017). Additionally, some researchers who find the Sobel test used for testing the significance of the mediating variable to be traditional (Sobel, 1982; Zhao, Lynch, & Chen, 2010) advocate

the need to choose the bootstrapping method in testing significance because it provides more effective and sturdier results (Hayes & Preacher, 2014; Rucker, Preacher, Tormala, & Petty, 2011). The bootstrapping method is a powerful statistical test called resampling and is used while testing the significance of the mediating variable (Gürbüz, 2019). Direct and indirect effects can be identified with a single process using this method without applying Baron and Kenny's (1986) 3-stage regression analysis. This study reports on whether the mediator variable is significant by looking at the confidence interval values obtained from the bootstrap test.

RESULTS

The first hypothesis of the research (i.e., statistically significant relationships are found between the variables of both perceived stress and general self efficacy by means of the variable of psychological resilience) has been tested first. While testing this hypothesis, the descriptive statistics of all the variables included in the research as well as their relationships with one another were examined. Table 1 includes the findings obtained as a result of the Pearson product-moment correlation coefficients analysis as well as the variables' standard deviation scores and averages.

Table 1. Mean, standard deviation and correlation values of the variables of the study

	Mean	Ss	(1)	(2)
Perceived Stress (1)	31.68	4.58		
Psychological Resilience (2)	19.92	4.35	.29*	
General Self Efficacy (3)	31.36	2.24	.23*	.45*

Note. * $p \leq .01$

According to Table 1, while the averages score and standard deviation for the variable of perceived stress have been found as 31.68 ± 4.58 , these values are 19.92 ± 4.35 for the variable of psychological resilience and have been calculated as 31.36 ± 2.24 for general self efficacy. When examining the binary relations between variables, the relationships psychological resilience has with both perceived stress ($r^2 = .08$) and general self efficacy ($r^2 = .20$) are seen to be significant ($p \leq .01$). Additionally, a significant relationship has been determined between perceived stress and general self efficacy ($r^2 = .05$; $p \leq .01$). The hypothesis H1, tested in line with the Pearson product-moment correlation analysis results, has been accepted.

When looking at the levels the variables in the research explain one another, psychological resilience has been determined to explain 8% of the perceived stress ($r^2 = .08$; $F_{(1, 632)} = 56.10$; $p \leq .01$), and this level is expressed as having a low explanatory level in the literature. At the same time, general self efficacy has been reported to explain 5% of the variance in scores perceived stress ($r^2 = .05$; $F_{(1, 632)} = 35.69$; $p \leq .01$). This explanatory level has also been determined to be at a low level in the literature. Lastly, psychological resilience can be said to explain 20% of general self efficacy ($r^2 = .20$; $F_{(1, 632)} = 158.14$; $p \leq .01$), and this explanatory ratio is mid-level (Leech, Barrett, & Morgan, 2008).

The remaining hypotheses of the research have been tested using conditional process analyses in line with the established model. The findings related to the conditional process analyses are presented in Figure 2:

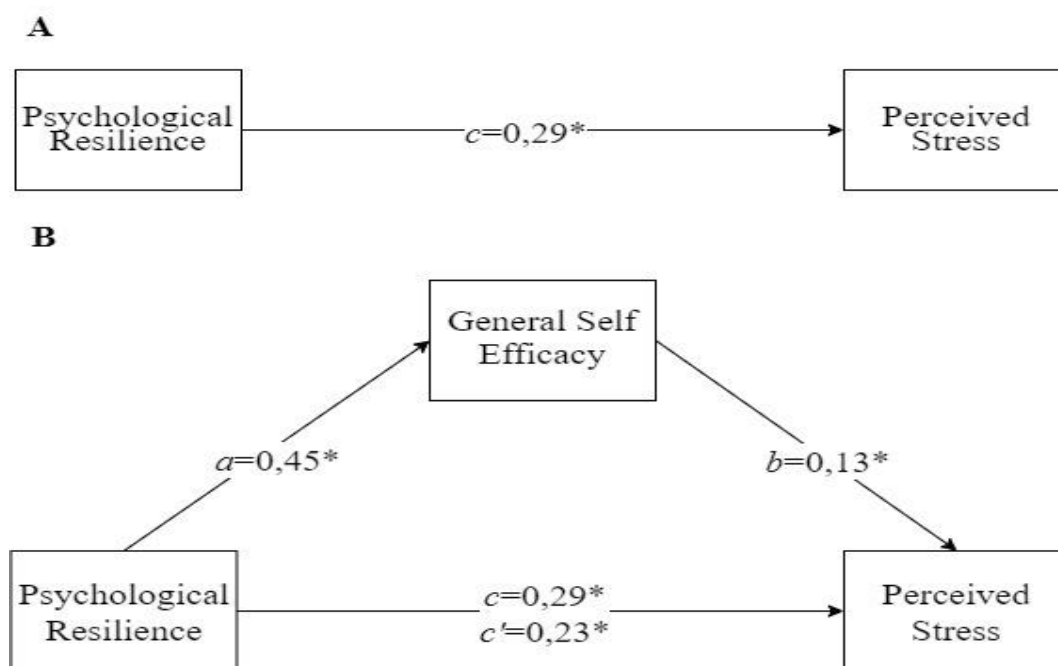


Figure 2. The mediating role of general self efficacy in the relationship between psychological resilience and perceived stress

The path coefficient (c) of psychological resilience (the predictor variable in the research) going to perceived stress (the predicted variable) has been determined in Figure 2-A as .29 ($p \leq .000$). This finding shows hypothesis $H2$ to be accepted. As seen in Figure 2-B, the path coefficient (a) going from psychological resilience to general self efficacy has been calculated as .45 ($p \leq .000$) and the path coefficient going from general self efficacy to perceived stress as .13 ($p \leq .002$). Through this obtained finding, hypothesis $H3$ of the research is also accepted. Again, when adding the mediating variable of general self efficacy to the established model in Figure 2-B, the path coefficient (c) between psychological resilience and perceived stress drops to .23. With the decrease of the path coefficient at the level of .06 ($c - c' = .06$; $p \leq .000$), general self efficacy is determined as having a partial mediating role on the relationship between psychological resilience and perceived stress. With this finding, the mediation model established on explaining perceived stress has been statistically verified, and the study's hypothesis $H4$ is accepted.

The bootstrap test has been used for examining the significance of the mediating role of the variable of general self efficacy. The significance level from indirect effects is determined using the bootstrap analysis (MacKinnon, Lockwood, & Williams, 2004). This study set the bootstrap value (resampling number) to 5000 in order to determine the significance of the mediation. In other words, the confidence interval values have been calculated over 5000 sub-samples. The bootstrap analysis, performed for the purpose of determining whether or not the partial mediating role of general self efficacy is significant on the relationship between psychological resilience and perceived stress, determined a non-zero value between the upper and lower limits at a 95% confidence interval. The result obtained in this regard shows general self efficacy's mediating role to be at a significant level (95% confidence interval [.02, .11]).

DISCUSSION, CONCLUSION & SUGGESTIONS

This research has examined the mediating role adults' general self efficacy has on the relationship between psychological resilience and perceived stress. Before examining the mediating role, the relationships among the three basic variables of the research were obtained. The first finding this research has arrived at is that individuals' levels of psychological resilience significantly and positively predict their levels of perceived stress. This obtained finding is seen to be inconsistent with the majority of previous research results. Although studies are detected in previous research where significant relationships have been found between psychological resilience and perceived stress, this significance is generally found to be negative (Bozdağ, 2020; Calvete et al., 2014; Rushton, Batcheller, Schroeder, & Donohue, 2015; Üzar-Özçetin & Erkan, 2019; Yağmur & Türkmen, 2017). Apart from these findings, studies are also found in the literature where no significant relationship exists between psychological resilience and perceived stress (Demir, 2018; Özyıldırım, 2015). Many factors can be mentioned in the emergence of many different results such as sampling traits, the conditions of the period when the data are collected, and differences in the characteristics being determined by the scales being used. Although the finding obtained in this study does not appear consistent with the literature, it has its own rationale. Psychological resilience is not about not experiencing stress or problems; it is about the power of being able to cope with these stresses and problems. Terzi (2006) expressed this concept as the power of self-recovery. The power of self-recovery is defined in the literature as individuals' power to be able to quickly return to their old self after stressful life events and to be able to adapt to what has happened after severely stressful life events (Garmezy, 1993; Masten, 2001). The research data have been gathered at a time when the pandemic has created a shocking impact on all people, the situation is yet to be able to be understood, and as a result people feel the need to use their psychological resilience more, namely the aspects regarding coping with the problem. Based on the definitions given above, the times when perceived stress is high can be assessed as times when individuals' psychological resilience also increases. In other words, the more intensely a person experiences the stressful situation, the more their psychological resilience also increases. Steinhart and Dolbier (2008) have also made statements in the literature supporting this idea. Together with all these perspectives, the positive relationship between psychological resilience and perceived stress can be argued to be an expected finding.

Another finding of the research is that a positive and significant relationship exists between perceived stress and general self efficacy. Research is available in the literature where the results of some studies are consistent with these findings while others are not. When examining the literature, a positive significant relationship between perceived stress and general self efficacy is encountered in the study performed by Charoensukmongkol (2014). Other studies performed and examined in recent years, while seeing the relationship between these two variables to be significant, have determined this relationship to be negative (Chen et al., 2020; Choi et al., 2013; Cziraki et al., 2018; Göger & Çevirme, 2019; Sahranc, 2007). Again, the conditions of the time when the data have been collected may be considered as impactful on why the results obtained in this study do not appear consistent with the findings from other research. In other words, the concept of perceived stress should not always be considered negatively. Saying that individuals with high levels of general self efficacy will be able to cope with states of stress they perceive is possible when perceived stress is perceived realistically and positively. Explanations supporting this idea can also be encountered in research performed both in Turkey and abroad (Diehl & Hay, 2010; Özbay, Palancı, Kandemir, & Çakır, 2012). Based on these explanations, individuals with high levels of

general self efficacy are expected to realistically perceive the stressful life events they are found within before developing defense mechanisms.

The last findings obtained from the binary relations in the research is concernin to the relationship between psychological resilience and general self efficacy. A positive and significant relationship has been determined to exist between these variables. The results of research in the literature both in Turkey and abroad support this research result. When looking at related studies, Demir and Kabakçı's (2020) up-to-date research shows individuals with high self efficacy to also have high levels of psychological resilience. Apart from that study, Kılıç et al.'s (2018) study determined a positive and significant relationship to exist between the level of general self efficacy and the level of psychological resilience. A person having positive self-perceptions and thoughts increases their level of general self efficacy. Individuals with thoughts and perceptions like this have been proven in the literature to also have high psychological resilience (Eminağaoğlu, 2006; Luszczynska et al., 2005; Önder & Gülay, 2008). As a result of the literature review, only one single study was encountered to have a finding not resembling this result of the current research. This study was conducted by Garza, Bain, and Kupczynski (2014), in which they were unable to find a significant relationship between psychological resilience and general self efficacy. Apart from this, no other study is encountered that shows no significant relationship to be present between these variables.

The most basic and significant research finding is that the variable of general self efficacy has a significant partial-mediating role between psychological resilience and perceived stress. No study is encountered in the literature that shows general self efficacy to have a mediating role on the relationship between psychological resilience and perceived stress. While this study shows psychological resilience to have a significant effect on perceived stress, its impact on perceived stress shows variations when general self efficacy is included in the model. Although individuals' levels of psychological resilience again affect their perceived stress, the effect of general self efficacy on perceived stress must not be underestimated. In other words, general self efficacy has a significant impact on perceived stress. The variable of general self efficacy having a significant mediating role on this relationship has been assessed as an expected finding. This is because the literature has reported individuals with high levels of general self efficacy to recover faster after stressful or difficult life events (Cziraki et al., 2018), namely that their power of self recovery is high (Kılıç et al., 2018). Based on these references and the resultant research findings, general self efficacy is also a significant variable on individuals' levels of perceived stress just like psychological resilience.

Some limitations should be taken into account while examining these research findings. Firstly, life had been restricted in many areas and people were undergoing a psychologically difficult period due to the COVID-19 pandemic process at the time when the research data were being collected. This situation is assessable as a limitation by considering its ability to impact research results. Apart from this, another limitation has been the collection of research data using online forms and the inability to answer participants' questions. Lastly, because each scale measures different traits, the scales in this study are limited by the qualities they measure.

Certain recommendations can be made in line with the results obtained in the research. Primarily, one must not hesitate to get psychological support at a time when the presence of stressful life events is generally required to keep our level of psychological resilience high. Individuals' levels of perceived stress are considered able to change with the support they receive. When considering the variables of

psychological resilience and general self efficacy among the factors that impact the level of perceived stress, individuals' psychological resilience being supported, and levels of general self efficacy being increased will make a positive impact on the stress they perceive. Apart from this, forming psycho-educational programs related to psychological resilience, mentioning the protective factors preventing the risk factors in these training (Davydov et al., 2010; Gizir & Aydın, 2006), and making applications (Terzi, 2006) can positively impact perceived stress levels and levels of general self efficacy. Applications can be made in the educational fields to increase individuals' levels of general self efficacy. Revealing positive emotions and having healthy interpersonal relations can be stated as another recommendation. Apart from this, it can be thought that this research finding is important for psychological counseling. Considering the psychological resilience, perceived stress, and general self efficacy of the clients, especially in the psychological counseling process that has developed since 2000, may be effective in terms of the healthier progress of the process as well as other factors (Arslan & Sommers-Flanagan, 2018). For future research, the model is recommended to be repeated on different sample groups, as well as broadening the research by adding new variables or arriving at a variety of findings by using other analyses. Reexamining after the pandemic process by addressing these variables in new studies to be done is considered important in terms of determining the differentiation that the conditions of the period formed over the research findings.

REFERENCES

- Akhunlar Turgut, M. N., Sarıot Ertürk, Ö., Karlı, F., & Şakiroğlu, M. (2018). Algılanan stres ve üniversite yaşamına uyum ilişkisinde bir aracı değişken: Ayrılık anksiyetesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 1-19.
- Arslan, Ü., & Sommers Flanagan, J. (2018). The new stage of the Turkish counseling system: Explosive growth (2000 to the present). *Journal of Multicultural Counseling and Development*, 46, 115-128. doi: 10.1002/jmcd.12096
- Atarbay, S. (2017). *Farklı bölümlerde öğrenim gören üniversite öğrencilerinin sosyal kaygı düzeylerinin psikolojik dayanıklılıklarına etkisi*. Yayınlanmamış Yüksek Lisans Tezi, Eğitim Bilimleri Enstitüsü, İstanbul Üniversitesi, İstanbul.
- Aypay, A. (2010). Genel Öz Yeterlik Ölçeği'nin (GÖYÖ) Türkçeye uyarlama çalışması. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, 2(11), 113-131.
- Baird, B. M., Lucas, R. E., & Donnellan, M. B. (2010). Life satisfaction across the lifespan: Findings from two nationally representative panel studies. *Social Indicators Research*, 99(2), 183-203.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (2006). Toward a psychology of human agency. *Psychological Science in the Public Interest*, 1(2), 164-180.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Benard, B. (2004). *Resiliency. What we have learned*. San Francisco: West Ed.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59(1), 20-28.
- Bozdağ, F. (2020). Pandemi sürecinde psikolojik sağlamlık. *Turkish Studies*, 15(6), 247-257.
- Burmaoğlu, S., Polat, M., & Meydan, C. H. (2013). Örgütsel davranış alanında ilişkisel analiz yöntemleri ve Türkçe yazında aracılık modeli kullanımı üzerine bir inceleme. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 13(1), 13-26.

- Büyüköztürk, Ş. (2016). *Sosyal bilimler için veri analizi el kitabı istatistik, araştırma deseni SPSS uygulamaları ve yorum* (22. Baskı). Ankara: Pegem Akademi.
- Calvete, E., Orue, I., & Hankin, B. L. (2014). A longitudinal test of the vulnerability-stress model with early maladaptive schemas for depressive and social anxiety symptoms in adolescents. *Journal of Psychopathology and Behavioral Assessment*, 37, 85-99.
- Campbell Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44(4), 585-599. [doi: 10.1016/j.brat.2005.05.001](https://doi.org/10.1016/j.brat.2005.05.001)
- Can, M., & Cantez, K. E. (2018). Üniversite öğrencilerinin mutluluk, psikolojik sağlık ve öz yeterlik düzeyleri arasındaki ilişki. *Aydın Toplum ve İnsan Dergisi*, 4(2), 61-76.
- Charoensukmongkol, P. (2014). Benefits of mindfulness meditation on emotional intelligence, general self-efficacy, and perceived stress: Evidence from Thailand. *Journal of Spirituality in Mental Health*, 16, 171-192.
- Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. *Journal of Organizational Behavior*, 25(3), 375-395.
- Chen, J., Li, J., Cao, B., Wang, F., Luo, L., & Xu, J. (2020). Mediating effects of self-efficacy, coping, burnout and social support between job stress and mental health among young Chinese nurses. *Journal of Advanced Nursing*, 76, 163-173.
- Choi, S., Kluemoer, D. H., & Sauley, K. S. (2013). Assessing emotional self-efficacy: Evaluating validity and dimensionality with cross-cultural samples. *Applied Psychology: An International Review*, 62(1), 97-123.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale the Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18, 76-82.
- Cziraki, K., Read, E., Laschinger, H. K. S., & Wong, C. (2018). Nurses' leadership self efficacy, motivation, and career aspirations. *Leadership in Health Services*, 31(1), 47-61. doi: [10.1108/LHS-02-2017-0003](https://doi.org/10.1108/LHS-02-2017-0003)
- Darlington, R. B., & Hayes, A. F. (2017). *Regression analysis and linear models: Concepts, application, and implementation*. New York: The Guilford Press.
- Davydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, 30(5), 479-495.
- Demir, T. (2018). *Sağlık çalışanlarında algılanan stres, psikolojik sağlık ve bilişsel duygu düzenleme stratejilerinin durumluk ve sürekli kaygı düzeyini yordama gücü*. Yayımlanmamış Yüksek Lisans Tezi, İstanbul Arel Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- Demir, A., & Kabakçı, A. C. (2020). Kano antrenörlerinin psikolojik sağlıkları, algılanan öz-yeterlikleri ve yaşam doyumunu arasındaki ilişkinin incelenmesi. *International Journal of Exercise Psychology*, 2(1), 21-28.
- De Terte, I., & Stephens, C. (2014). Psychological resilience of workers in high-risk occupations. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 30(5), 353-355.
- Diehl, M., & Hay, E. L. (2010). Risk and resilience factors in coping with daily stress in adulthood: The role of age, self-concept incoherence, and personal control. *Developmental Psychology*, 46, 1132-1146.
- Doğan, T. (2015). Kısa Psikolojik Sağlık Ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. *The Journal of Happiness & Well-Being*, 3(1), 93-102.
- Doğan, T. (2016). *Kendini toparlama gücü: Psikolojik sağlık*. <https://www.tayfundogan.net/2016/10/20/kendini-toparlama-gucu-psikolojik-saglamlik/> adresinden elde edildi. Erişim Tarihi: 05.04.2020

- Drapeau, S., Saint Jacques, M., Le'pine, R., Be'gin, G., & Bernard, M. (2007). Processes that contribute to resilience among youth in foster care. *Journal of Adolescence*, 30, 449-466.
- Durna, U. (2006). Üniversite öğrencilerinin stres düzeylerinin bazı değişkenler açısından incelenmesi. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 20(1), 319-345.
- Eminağaoğlu, N. (2006). *Güç koşullarda yaşayan sokak çocuklarında dayanıklılık (sağlamlık)*. Yayımlanmamış Yüksek Lisans Tezi, Ege Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir.
- Eraslan Çapan, Y., & Arıcıoğlu, Y. (2015). Psikolojik sağlamlığın yordayıcısı olarak affedicilik. *e-Uluslararası Eğitim Araştırmaları Dergisi*, 5(4), 70-82.
- Eryılmaz, S. (2012). *Üniversite öğrencilerinde psikolojik sağlamlığı yordamada, yaşam doyumu, benlik saygısız, iyimserlik ve kontrol odağının incelenmesi*. Yayımlanmamış Yüksek Lisans Tezi, Muğla Sıtkı Koçman Üniversitesi, Eğitim Bilimleri Enstitüsü, Muğla.
- Eskin, M., Harlak, H., Demirkıran, F., & Dereboy, Ç. (2013). Algılanan Stres Ölçeğinin Türkçeye uyarlanması: Güvenirlilik ve geçerlik analizi. *New/Yeni Symposium Journal*, 3(51), 132-140.
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review Public Health*, 26, 399-419.
- Fraser, M. W., Richman, J. M., & Galinsky, M. J. (1999). Risk, protection, and resilience: Toward a conceptual framework for social work practice. *Social Work Research*, 23(3), 131-143.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology?. *Review of General Psychology*, 9, 103-110.
- Garmez, N. (1993). Children in poverty: Resilience despite risk. *Pediatrics*, 56, 217-236.
- Garza K. K., Bain S. F., & Kupczynski L. (2014). Resiliency, self-efficacy, and persistence of college seniors in higher education. *Research in Higher Education*, 26, 1-19.
- Gizir, C., & Aydın, G. (2006). Psikolojik Sağlamlık ve Ergen Gelişim Ölçeği'nin uyarlanması: Geçerlik ve güvenilirlik çalışmaları. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 3(26), 87-99.
- Gizir, C. A. (2007). Psikolojik sağlamlık, risk faktörler ve koruyucu faktörler üzerine bir derleme çalışması. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 3(28), 113-128.
- Göger, S., & Çevirme, A. (2019). Hemşirelik öğrencilerinde öz yeterlik düzeyinin eğitim stresi üzerine etkisi. *Koç Üniversitesi Hemşirelikte Eğitim ve Araştırma Dergisi*, 4(16), 306-312.
- Greenberg, L. S. (2011). *Comprehensive stress management*. New York: Mc Graw Hill.
- Gürbüz, S. (2019). *Sosyal bilimlerde aracı, düzenleyici ve durumsal etki analizleri*. Ankara: Seçkin Yayıncılık.
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67, 451-470.
- Hayes, A. F., & Rockwood, N. J. (2017). Regression-based statistical mediation, moderation, and conditional process analysis: Observations, recommendations, and implementation. *Behaviour Research and Therapy*, 98, 39-57.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: The Guilford Press.
- Jacelon, C. S. (1997). The trait and process of resilience. *Journal of Advanced Nursing*, 25, 123-129.
- Jimmieson, N. L. (2000). Employee reactions to behavioural control under conditions of stress: The moderating role of self-efficacy. *Work & Stress*, 14(3), 262-280.
- Kararımk, Ö. (2006). Psikolojik sağlamlık, risk faktörleri ve koruyucu faktörler. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 3(26), 129-142.
- Kararımk, Ö., & Siviş Çetinkaya, R. (2011). Benlik saygısının ve denetim odağının psikolojik sağlamlık üzerine etkisi: Duyguların aracı rolü. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 4(35), 30-43.

- Kılıç, N., Mammadov, M., Koçhan, K., & Aypay, A. (2018). Üniversite öğrencilerinde genel öz yeterlik inancı ve beden imajının psikolojik sağlık düzeyini yordama gücü. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 1-13.
- Kırca, B., & Saruhan, V. (2020). Pozitif psikoloji ekseninde baş etme. İçinde D. Ümmet (Ed.), *Tüm kavram ve yaklaşımlarıyla pozitif psikoloji* (s. 143-165). Ankara: Pegem Akademi.
- Kobau, R., Seligman, M. E., Peterson, C., Diener, E., Zack, M. M., Chapman, D., & Thompson, W. (2011). Mental health promotion in public health: Perspectives and strategies from positive psychology. *American Journal of Public Health*, 101(8), e1–e9. <https://doi.org/10.2105/AJPH.2010.300083>
- Kunseler, F. C., Oosterman, M., de Moor, M. H. M., Verhage, M. L., & Schuengel, C. (2016). Weakened resilience in parenting self-efficacy in pregnant women who were abused in childhood: An experimental test. *PLoS ONE*, 11(2), e0141801. <https://doi.org/10.1371/journal.pone.0141801>
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2008) *SPSS for intermediate statistics: Uses and interpretation*. New York: Lawrence Erlbaum.
- Luszczynska, A., Scholz, U., & Schwarzer, R. (2005). The General Self-efficacy Scale: Multicultural validation studies. *The Journal of Psychology*, 139(5), 439-457.
- Luszczynska, A., Gutiérrez-Doña, B., & Schwarzer, R. (2005). General self-efficacy in various domains of human functioning: Evidence from five countries. *International Journal of Psychology*, 40(2), 80-89.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543-562.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39, 99-128.
- Masten, A. S. (2001). Resilience processes in development. *American Psychologist*, 56(3), 227-238.
- Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and Identity*, 9(3), 225-240.
- Newby Fraser, E., & Schlebusch, L. (1997). Social support, self-efficacy and assertiveness as mediators of student stress. *Psychology: A Journal of Human Behavior*, 34, 61-69.
- Olsson, C. A., Bond, L., Burns, J. M., Vella-Brodrick, D. A., & Sawyer, S. M. (2003). Adolescent resilience: A concept analysis. *Journal of Adolescence*, 26(1), 1-11.
- Orth, U., & Robins, R. W. (2014). The development of self-esteem. *Current Directions in Psychological Science*, 23(5), 381-387.
- Önder, A., & Gülay, H. (2008). İlköğretim 8. sınıf öğrencilerinin psikolojik sağlamlığının çeşitli değişkenler açısından incelenmesi. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, 23, 192-197.
- Öz, F., & Bahadır Yılmaz, E. (2009). Ruh sağlığının korunmasında önemli bir kavram: Psikolojik sağlamlık. *Sağlık Bilimleri Fakültesi Hemşirelik Dergisi*, 1, 82-89.
- Özbay, Y., Palancı, M., Kandemir, M., & Çakır, O. (2012). Üniversite öğrencilerinin öznel iyi oluşlarının duygusal düzenleme, mizah, sosyal öz-yeterlik ve başa çıkma davranışları ile yordanması. *Türk Eğitim Bilimleri Dergisi*, 10(2), 325-345.
- Özyıldırım, E. (2015). *Erzurum il merkezinde çalışan bekimlerde yaşam kalitesi, algılanan stres düzeyi ve etkileyen faktörlerin incelenmesi*. Yayınlanmamış Tıpta Uzmanlık Tezi, Atatürk Üniversitesi, Sağlık Bilimleri Enstitüsü, Erzurum.
- Parmaksız, İ. (2020). İyimserlik, özgecilik ve medeni durumun psikolojik dayanıklılık üzerindeki etkileri. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 48, 285-302.
- Pehlivan, T. (2019). *Onkoloji-Hematoloji hemşirelerine uygulanan kısa ve uzun süreli merhamet yorgunluğu dayanıklılık programının yaşam kalitesi, algılanan stres ve psikolojik dayanıklılık üzerine etkisi*. Yayınlanmamış Doktora Tezi, Koç Üniversitesi, Sağlık Bilimleri Enstitüsü, İstanbul.

- Renati, R., Bonfiglio, N. S., & Pfeiffer, S. (2016). Challenges raising a gifted child: Stress and resilience factors within the family. *Gifted Education International*, 33(2), 1-30.
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation analysis in Social Psychology: Current practices and new recommendations. *Social and Personality Psychology Compass*, 5(6), 359-371.
- Rushton, C. H., Batcheller, J., Schroeder, K., & Donohue, P. (2015). Burnout and resilience among nurses practicing in high-intensity settings. *American Journal of Critical Care: An Official Publication, American Association of Critical-Care Nurses*, 24(5), 412-420.
- Sahranç, Ü. (2007). *Stres kontrolü, genel öz-yeterlik, durumluk kaygı ve yaşam doyumuyla ilişkili bir akış modeli*. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Scherbaum, C. A., Cohen Charash, Y., & Kern, M. J. (2006). Measuring general self-efficacy: A comparison of three measures using item response theory. *Educational and Psychological Measurement*, 66(6), 1047-1063.
- Scholz, U., Gutiérrez Doña, B., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? Psychometric findings from 25 countries. *European Journal of Psychological Assessment*, 18(3), 242-251.
- Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In J. Weinman, S. Wright & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-Nelson.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.
- Short, C. A., Barnes, S., Carson, J. F., & Platt, I. (2020). Happiness as a predictor of resilience in students at a further education college. *Journal of Further and Higher Education*, 44(2), 170-184.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Jennifer Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194-200.
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290-312). San Francisco: Jossey-Bass.
- Steinberg, L. (2007). Risk taking in adolescence: New perspectives from brain and behavioral science. *Current Directions in Psychological Science*, 16(2), 55-59.
- Steinhardt, M., & Dolbier, C. (2008). Evaluation of a resilience intervention to enhance coping strategies and protective factors and decrease symptomatology. *Journal of American College Health*, 56, 445-453.
- Terzi, Ş. (2006). Kendini Toparlama Ölçeğinin uyarlanması: Geçerlik ve güvenilirlik çalışmaları. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 3(26), 77-86.
- Tong, Y., & Shanggui, S. (2004). A Study on general self-efficacy and subjective well-being of low ses college students in a Chinese university. *College Students Journal*, 38(4), 637-642.
- Totan, T. (2013). Nicel betimsel desenler. İçinde D. M. Siyez (Ed.), *Psikolojik danışmada araştırma yöntemleri* (s. 249-282). Ankara: Mentis Yayıncılık.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86(2), 320-333.
- Turgut, Ö. (2015). *Ergenlerin psikolojik sağlamlık düzeylerinin, önemli yaşam olayları, algılanan sosyal destek ve okul bağlılığı açısından incelenmesi*. Yayınlanmamış Yüksek Lisans Tezi, Anadolu Üniversitesi, Eğitim Bilimleri Enstitüsü, İzmir.
- Üstün, A., & Bayar, A. (2015). Üniversite öğrencilerinin depresyon, anksiyete ve stres düzeylerinin çeşitli değişkenlere göre incelenmesi. *Eğitim ve Öğretim Araştırmaları Dergisi*, 4(1), 384-390.
- Üzar Özçetin, Y. S., & Erkan, M. (2019). Yüksek riskli gebelerde psikolojik sağlamlık, algılanan stres ve psikososyal sağlık. *Çukurova Medical Journal*, 44(3), 1017-1026.

- Wang, J. L., & Zhang, D. J. (2015). Resilience theory and its implications for Chinese adolescents. *Psychological Reports: Disability & Trauma*, 117(2), 354-375.
- Yağmur, T., & Türkmen, S. N. (2017). Ruhsal hastalığı olan hastalara bakım veren aile üyelerinde algılanan stres ve psikolojik dayanıklılık. *Manisa Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi*, 4(1), 542-548.
- Yıldırım, F., & İlhan, İ. Ö. (2010). Genel Özyeterlilik Ölçeği Türkçe formunun geçerlilik ve güvenilirlik çalışması. *Türk Psikiyatri Dergisi*, 21(4), 301-308.
- Yörük, İ. (2019). *Özel yetenekli öğrencilerin psikolojik sağlamlık düzeylerinin benlik saygısı, akran ilişkileri ve ebeveyn tutumları açısından incelenmesi*. Yayımlanmamış Yüksek Lisans Tezi, Ege Üniversitesi, Eğitim Bilimleri Enstitüsü, İzmir.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron ve Kenny: Myths and Truths about Mediation Analysis. *Oxford University Press*, 37(2), 197-206.

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RESEARCH

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ARAŞTIRMA

Açık Erişim

The Relationship among Mindfulness, Sense of Uniqueness, and Hope: The Mediatonal Role of Psychological Inflexibility

Bilinçli Farkındalık, Kişisel Biriciklik Algısı ve Umud Arasındaki İlişki: Psikolojik Esnekliğin Aracılık Rolü

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ABSTRACT

Hope is one of the sources of resilience that facilitates adaptation and coping in the face of crucial life changes and difficulties. Therefore, more studies are needed regarding hope and its predictors. Based on this philosophy, the mediating role of psychological inflexibility in the relationship among hope, mindfulness, and sense of uniqueness was examined in this study. A total of 352 undergraduate students (279 female and 73 male) from various universities in Turkey were included in to study. The results indicated that psychological inflexibility has a full mediator role in the relationship between mindfulness and hope and a partial mediator role in the relationship between sense of uniqueness and hope. The findings are discussed in the context of theoretical postulation and current empirical studies. In line with the results, recommendations for researchers and mental health practitioners are provided.

ÖZET

Umut, önemli yaşam olayları ve zorlukları karşısında uyum sağlamayı ve başa çıkmayı kolaylaştıran psikolojik sağlık kaynaklarından biridir. Bu nedenle, umut ve onun yordayıcıları ile ilgili daha fazla çalışmaya ihtiyaç vardır. Dolayısıyla, bu çalışmada umut, bilinçli farkındalık ve kişisel biriciklik algısı arasındaki ilişkide psikolojik esnekliğin aracılık rolü incelenmiştir. Çalışmaya Türkiye'nin farklı üniversitelerinde lisans düzeyinde öğrenim gören 279 kadın, 73 erkek olmak üzere toplam 352 kişi dahil edilmiştir. Sonuçlar, psikolojik esnekliğin bilinçli farkındalık ve umut arasındaki ilişkide tam aracılık ve kişisel biriciklik algısı ile umut arasındaki ilişkide kısmi aracılık rolleri olduğunu göstermiştir. Bulgular, kuramsal ve güncel ampirik çalışmalar bağlamında tartışılmıştır. Sonuçlar doğrultusunda araştırmacılar ve ruh sağlığı uzmanları için çeşitli öneriler sunulmuştur.

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INTRODUCTION

Although the hope is a term often used in common parlance, it is used interchangeably with wishful thinking or even positive thinking. Snyder (2000) defined hope as the belief that one can produce a path to achieve desired goals. In other words, hope, as a goal-oriented agency, is defined as the set of cognition that initiates as well as maintains action (Snyder, 2002; Snyder et al., 1996). In Snyder's model (1991; 2000; 2002), pathways thinking and agency thinking are considered as two basic components of hope. While "pathways thinking" describes establishing and creatively regulating realistic and clear goals, "agency thinking" is the belief and self-confidence to overcome the obstacles and achieve goals (Larsen et al., 2020). Along this line, agency thinking reflects the motivational component of hope (Snyder & Lopez, 2005).

It is argued that the dimension of emotional aspects of hope should be added to in Snyder's models (Ward & Wampler, 2010). However, the emotional component of hope is considered as a result of cognition. Although the hope is conceptualized from the state and dispositional perspective, it is articulated that the dispositional hope also includes the state version (Snyder et al., 1996).

On the other hand, specifically hope, and broadly positive psychology has been criticized in terms of due to high emphasis on hedonic functioning and some concerns related to potential conflict between individual positive functioning and global peace (e.g., Aspinwall & Leaf, 2002; Cohrs et al., 2013; Lazarus, 2003). However, accumulating empirical data suggested that hope may contribute positively to psychological functioning with its own right. For instance, researches have shown that high hope is associated with low suicidal ideation (Huen, et al., 2015), and low alcohol and drug use (Gutierrez, 2019). Additionally, researches have shown that hope positively predicts academic self-efficacy (Feldman & Kubota, 2015), optimism and self-esteem (Ling et al., 2015), and life satisfaction (Yang et al., 2016). Although there have been studies that reflect that hope is an indicator of psychological functioning, there is a scarcity of studies in which the predictors of hope are investigated. Various studies have shown that a significant positive relationship between mindfulness and hope (e.g., Loo et al., 2014; Singh & Devender, 2015). Furthermore, it has been demonstrated that hope was predicted by mindfulness (e.g., Ender et al., 2019; Munoz et al., 2018). In a recent study, it has been found that mindfulness can increase analytical thinking and decrease belief in the just world (Fitzgerald & Lueke, 2017). It can be deduced that mindfulness can also directly predict hope, as it can increase analytical thinking, which is an important component of hope. Therefore, in this study, we hypothesize that mindful awareness and uniqueness may be the determinants of hope.

Mindfulness is defined as improving attention and awareness of current experiences and reality (Brown & Ryan, 2003). Additionally, mindfulness is explained as cultivating current experience nonjudgmentally and purposefully (Kabat-Zinn, 2003). Mindfulness may contribute to affect regulation and affective well-being (Jimenez et al., 2010; Rowland et al., 2018) and psychological well-being (Brown & Ryan, 2003). It has been found that a strong mediating role of psychological need satisfaction exists in relation to mindfulness and positive/ negative affect as well as depression, stress, and anxiety (Charbonneau, 2019). Similarly, in a study by Sarıçalı and Satici, (2017), it was demonstrated that mindfulness predicts psychological vulnerability in Turkish undergraduate sample. Apart from western cultures, moreover, it is theoretically argued that mindfulness may be the main determinant of well-being beyond the hedonic and eudaimonic well-being paradigm (Christopher, 2018).

One of the important functions of mindfulness is to contribute to affect regulation by making use of cognitive energy to focus on the current experiences. Accordingly, mindfulness may diminish mind wandering (Deng et al., 2014) and the crucial role of mindful acceptance of the current moment in reducing mind wandering via mindfulness training has also been revealed (Rahl et al., 2017). Accumulating evidence indicates that mindfulness is the opposite of mind wandering (Crosswell et al., 2019; Mrazek et al., 2012). The contribution of mindfulness to the regulation of cognitive processes and cognitive energy to focus on the current experience is expected to contribute to hope which is defined as finding alternative ways of solving problems and motivations for the solution (Ender et al., 2019). Therefore, mindful awareness has been proposed as a determinant of hope in this study. With this in mind, it was hypothesized that, may also be a mediator in this relationship. Although psychological inflexibility is considered a mindfulness-related construct, it is stated that there is limited research in which these two phenomena are examined together (Woodruff et al., 2014).

The effort to avoid present experiences, especially negative ones, overwhelms the person and paradoxically push them into painful experiences of inflexibility (Hayes et al., 2006). Psychological inflexibility is the reluctance to keeping contact with present feelings, thoughts, and bodily sensations (Hayes et al., 2004). According to the psychological inflexibility models, in addition to avoiding experience, using language, also inflate the pains as the person begins to symbolizing the experience as opposed to mindfully experiencing it in the present moment (Chawla & Ostafin, 2007). Thus, because of psychological inflexibility, a person's intellectual and behavioral repertoire is restricted, which is also crucial for hope.

Researchers have shown that psychological inflexibility is positively associated with depression, stress anxiety (Hayes et al., 2004; Meunier et al., 2014) depressive symptoms (Kato, 2016), post-traumatic stress disorder (Meyer et al., 2019), and academic procrastination (Sutcliffe et al., 2019). In terms of personality, it was indicated that high mindfulness was associated with low neuroticism and high conscientiousness, whereas high psychological inflexibility was associated with high neuroticism and low conscientiousness (Latzman & Masuda, 2013). In another study, mindfulness and psychological inflexibility were found to be separately related to distress, and it was concluded that mindfulness and psychological inflexibility were interrelated concepts (Masuda & Tully, 2012). Based on the relationship between psychological inflexibility and depressive symptoms and variables that show psychological functioning, this study proposed that psychological inflexibility may mediate the relationship between mindfulness and hope. Additionally, since it regulates the behavior and thoughts of the person in line with their genuine values (Hayes et al., 2006), the mediating role of psychological inflexibility in uniqueness and hope is also expected.

The perception of uniqueness in the literature has been defined as two different approaches, namely need for uniqueness (Snyder & Fromkin, 1977) and sense of uniqueness (Şimşek & Yalınçetin, 2010). While the need for uniqueness describes an effort to be different in a positive manner (Snyder & Fromkin, 1977), the sense of uniqueness is described as an important part of the identity that facilitates the acceptance of self-specific characteristics (Şimşek & Yalınçetin, 2010). Research studies concerning the sense of uniqueness indicated that high uniqueness was associated with high happiness (Demir et al., 2013; Şimşek & Demir, 2013), high sense of uniqueness was also associated with high authenticity (Koydemir et al., 2018). In another study, the mediating role of sense of uniqueness in relation to extroversion and openness to experience personality traits and happiness was documented (Koydemir et

al., 2014). In this study, it was expected that sense of uniqueness would predict hope through psychological inflexibility. As an interdependent culture in Turkey, autonomy is crucial for personal growth like in collectivistic cultures (Kagitcibasi, 2005, 2013). Therefore, it may be expected that the sense of uniqueness predicated on autonomy may predict psychological inflexibility. It may also be speculated that in interdependent cultures, rumination and cognitive diffusion which originated from relatively intertwined relationships may be more frequent. Therefore, the sense of uniqueness may increase hope by reducing psychological inflexibility.

The Present Study

Although the hope is an important psychological construct in daily life and therapeutic encounter (Ward & Wampler, 2010; Winter Plumb et al., 2020) it is considered an under-research topic (Flaskas, 2007; Larsen et al., 2020; Scioli et al., 2011). In a limited number of studies, the contribution of hope to positive functioning has been investigated. However, to fully realize the potential of hope as a construct, it is necessary to determine the variables that may predict hope. Moreover, hope was found to be a more important determinant of functionality in high school students than in middle school students (Lenz, 2021). In line with this finding, it was inferred that hope may be more important for undergraduate students who are at an important developmental crossroads and the predictors of hope were found to be worthy of research in an undergraduate sample. Based on this philosophy, the following hypotheses are proposed in this research:

Hypothesis 1: Mindfulness will be positively related to hope.

Hypothesis 2: Personal sense of uniqueness will be positively related to hope.

Hypothesis 3: Psychological inflexibility will be negatively related to hope.

Hypothesis 4: Psychological inflexibility will mediate the relationship among mindfulness, uniqueness, and hope.

METHOD

Participants and Procedures

A total of 356 voluntary university students in Turkey were recruited via an online survey from advertisements on Turkish online forums, Facebook and WhatsApp. Inclusion criteria were being (i) Turkish, (ii) being able to understand spoken Turkish, (iii) aged 18 years or older, and (iv) being a university student. Informed consent was given to the participants before data were collected. Since a large number of items were left blank, a set of four response sets was excluded before the analysis, and the remaining 352 pieces of data (279 female and 73 male) were analyzed. The ages of the participant range from 17 to 34 years ($M = 20.72$, $SD = 1.43$).

Ethical Statement

All procedures conducted were approved by the Nevşehir Hacı Bektaş Veli University Scientific Research and Ethical Review Board. (Decision Number: E.9755, Date: 14.05.2020).

Data Collection Tools

Dispositional Hope Scale (DHS). was developed by Snyder et al. (1991) to evaluate hope perceptions. DHS consists of 12 items and two subscales called Pathways thinking (e.g., There are lots of ways around

any problem) and Agency thinking (e.g. I energetically pursue my goals). The four items are fillers that are not related to hope. Except for the filler items, DHS consists of eight items with eight Likert types. Turkish form of the DHS was adapted by Tarhan and Bacanlı (2015). The scores obtained from the scale range between eight and 64. The increase in the scores indicates an increased dispositional hope perception. Exploratory factor analysis showed that items were collected in two factors and the total variance was explained as 61%. As the result of the confirmatory factor analysis, fit index values were emerged as GFI = .96, AGFI = .92, CFI = .96 and RMSEA = .077. and was found as .81. Test re-test reliability coefficient of Pathways thinking was .78 and that of Agency thinking was .81 and internal consistency coefficient was .84 of the Turkish form of hope. In this study, Cronbach's Alpha coefficient was .82.

Acceptance and Action Questionnaire-II (AAQ-II). Original AAQ-II was designed by Bond et al. (2011) to assess psychological inflexibility based on the Acceptance and Commitment Therapy. AAQ-II is a seven-point Likert-type scale that consists of seven items (e.g. My painful experiences and memories make it difficult for me to live a life that I would value). High scores indicate lower psychological flexibility. Turkish form of the AAQ-II was adapted by Meunier et al. (2014). The first confirmatory factor analysis result showed that the first model of the AAQ-II poorly fitted the data because of the strong relationship between items 1 and 4. After the adding the estimates of the covariance between the errors of items 1 and 4, it is seen that the second model has acceptable fit indices (Satorra-Bentler scaled $\chi^2(13) = 35.42, p < .001, CFI = .97, RMSEA = .08, SRMR = .05$). The poor fit of the data problem due to strong similarity between items 1 and 4 was also observed in this study. Meunier et al. (2014) recommended that the model could be evaluated by discard one of these items. Therefore, the analysis was executed with six items by removing the first item from the Turkish form. In the Turkish adaptation study of the AAQ-II, the internal consistency coefficient was .88 and the test-retest coefficient was .78 (Meunier et al., 2014). The Cronbach's alpha coefficient was found as .86 in the current study.

Personal Sense of Uniqueness (PSU) Scale. PSU scale was developed by Şimşek and Yalınçetin (2010) to measure individuals' personal sense of uniqueness. Explanatory factor analysis supported the one factor with five items (e.g., As people get to know me more, they begin to recognize my special features) construct of the PSU scale. The result of the confirmatory factor analysis showed a nearly perfect fit to the data: $\chi^2/df = 0.30, CFI = 1.00, AGFI = 1.00, GFI = 1.00, SRMR = .008, \text{ and } RMSEA = .000$. The internal consistency coefficient was found .81 and test re-test reliability was found as .80. In the current study, it was found that there is no meaningful relationship between item 3 and the total of the scale ($p > .05$) and this item reduces the Cronbach's Alpha internal consistency (.55). Thus, further analyses were executed by removing this item. Cronbach's Alpha internal consistency coefficient was found .69 in the current study.

Mindful Attention Awareness Scale (MAAS). The original MAAS was developed by Brown and Ryan (2003). The MAAS is a six-point Likert type and includes 15 items (e.g., I find myself listening to someone with one ear, doing something else at the same time.). that measure awareness of the experience occurring in the present moment in daily life. Higher scores indicate greater levels of mindfulness. Turkish form of the MAAS was adapted by Özyeşil, Arslan, Kesici and Deniz (2011). The confirmatory factor analysis showed that one factor with 15 items indicates an acceptable fit to the data ($\chi^2/df = 2.086, RMSEA = .06, GFI = .93, \text{ and } AGFI = .91$). The Cronbach's Alpha coefficient was .80 and the test-retest correlation coefficient was .86. In the current study, Cronbach's Alpha internal consistency coefficient was .83.

Data Analysis

In the study, the mediational role of psychological inflexibility in the relationship among mindfulness, uniqueness perception, and hope were tested via structural equation modeling (SEM). SEM was used to test the measurement and mediation models with the help of AMOS Graphics. Descriptive and correlation analyses were executed in IBM SPSS Statistics 22.0.

Item parceling method was used for mindfulness. This method is based on reducing the number of observed variables to provide controlling measurement errors because of multiple items for the latent variable (Little et al., 2002), and increase the normality and reliability of the measures (Nasser-Abu Alhija & Wisenbaker 2006). Five item parcels for mindfulness were constructed concerning with balancing approach. In this approach, items with the highest item correlation and lowest correlation are matched (Little et al., 2013).

Mediation analysis consists of two phases. In the first step, the measurement model is tested. In the second step, if the statistical values obtained from the measurement model are adequate, the measurement model would be tested with the help of the maximum likelihood estimation paradigm. Some measurement error and goodness of fit index values such as $\chi^2/df < 5$, CFI, GFI, TLI, IFI $> .90$, RMSEA, and SRMR < 0.08 were used to test the validity of the models (Hu & Bentler 1999; MacCallum et al. 1996; Tabachnick & Fidell, 2007). Further, models were compared using path coefficients and χ^2 test.

The percentile bootstrapping method was used to determining the mediator roles of psychological inflexibility in the relationships among mindfulness, uniqueness, and hope. The bootstrapping method was computed considering 95% bias-corrected confidence intervals of the total, direct, and indirect effects from 5,000 resample of the data. The proposed mediational model is considered statistically significant since it does not include zero in the specified confidence interval.

RESULTS

Descriptive Statistics and Correlations

The descriptive statistics concerning psychological inflexibility, uniqueness, mindfulness, and hope as well as the correlation results of these variables are given in Table 1. Firstly, it was checked whether the distribution of the variables in this research met the criteria of the normality assumption. It is seen that skewness coefficients range from $-.43$ to $.22$, and kurtosis coefficients range from $-.72$ to $.26$. According to Field, (2009), it can be stated that normality assumption of all variables was met. The correlation analysis found that both dimensions of hope positively correlated with the uniqueness and parcels of mindfulness. On the other hand, psychological inflexibility negatively correlated with all variables.

Table 1. Descriptive statistics for the variables (n = 352)

Variable	1	2	3	4	5	6	7	8	9
1. Hope1	-								
2. Hope2	.61**	-							
3. MindPar1	.11*	.20**	-						
4. MindPar2	.19**	.16**	.51**	-					
5. MindPar3	.16**	.23**	.50**	.56**	-				
6. MindPar4	.19**	.19**	.53**	.56**	.53**	-			
7. MindPar5	.23**	.31**	.48**	.51**	.62**	.48**	-		
8. Uniqueness	.29**	.30**	-.01	-.02	.06	-.03	.05	-	
9. Psych. inflex.	-.27**	-.43**	-.49**	-.30**	-.40**	-.30**	-.45**	-.14**	-
M	24.43	22.08	3.25	4.19	4.17	4.12	4.15	14.92	21.12
SD	4.63	4.93	.97	.97	.95	1.01	.98	3.29	8.85
Skewness	-.5	-.43	.29	-.17	-.11	-.19	-.06	-.36	.22
Kurtosis	-.30	.26	-.10	-.59	-.64	-.49	-.46	-.68	-.72

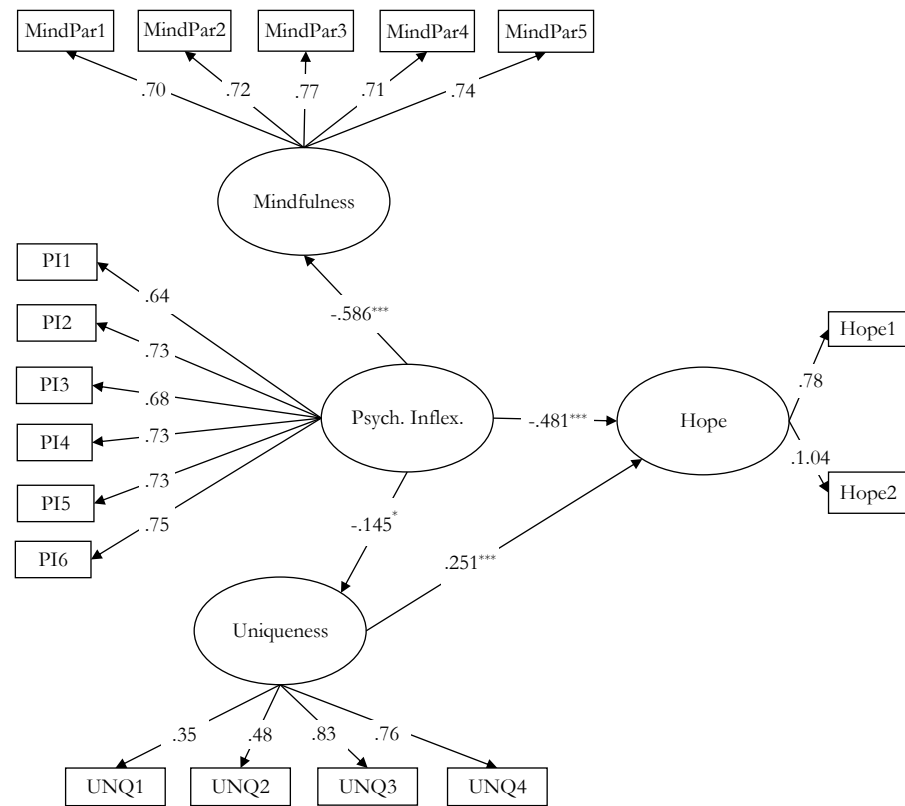
Note. ** $p < .01$; * $p < .05$; *Par* Parcel; *Hope1* Pathways Thinking Dimension of Dispositional Hope; *Hope2* Agency Thinking Dimension of Dispositional Hope; *Mind* Mindfulness; *Psych. Inflex.* Psychological inflexibility

Measurement Model

In the study, the measurement model had four latent factors which are hope, sense of uniqueness, psychological inflexibility, mindfulness, and 23 observed variables. The test of measurement model demonstrated that data has an acceptable fit: $\chi^2 (222, N = 352) = 418.05, p < .001$; GFI = .90; CFI = .93; TLI = .92; RMSEA = .05; SRMR = .055. The factor loadings (ranged .35 to .1.03) demonstrated that they are exact representations of their latent factors for all indicators. When these values are taken into consideration, it may be stated that the measurement model was accepted.

Structural Model

After approving of the measurement model, a model where psychological inflexibility is a partial mediator of the relationship between mindfulness, sense of uniqueness, and hope was tested. Model 1 showed an acceptable fit to the data: $\chi^2 (223, N = 352) = 418.05, p < .001$; CFI = .93; TLI = .93; GFI = .90; SRMR = .055; RMSEA = .050. On the other hand, the paths between mindfulness and hope was not significant ($\beta = .14, p > .05$). Therefore, this meaningless path was removed and Model 2 where psychological inflexibility was full mediator between mindfulness and hope but partial mediator between uniqueness and hope was tested. Model 2, also, showed an acceptable fit to data: $\chi^2 (224, N = 352) = 421.52, p < .001$; CFI = .93; TLI = .92; GFI = .90; SRMR = .056; RMSEA = .050. Moreover, Chi square difference test results showed that an additional path from mindfulness to hope did not significantly contribute to the model fit ($\Delta\chi^2 = 3.47, df = 1, p > .05$). Thus, Model 2 where psychological inflexibility was full mediator between mindfulness and hope was chosen. The path coefficients for this model are given in Figure 1.



Note. $N = 352$; *** $p < .001$; Note. ** $p < .01$; * $p < .05$; Par Parcel; Hope1 Pathways Thinking Dimension of Dispositional Hope; Hope2 Agency Thinking Dimension of Dispositional Hope; Mind Mindfulness; PI item of Psychological Inflexibility; Psych. Inflex. Psychological Inflexibility; UNQ item of Uniqueness.

Figure 1. Standardized factor loading of the mediated structural model.

Bootstrapping

Bootstrapping was performed with 5000 resampling via 95% bias-corrected bootstrapped confidence intervals (CIs) to provide further evidence of whether the direct and indirect effect of mindfulness and uniqueness through psychological inflexibility was significant. The bootstrap coefficients and the confidence intervals are presented in Table 2.

Table 2. Parameters and 95 % CIs for the paths of the mediated model

Model pathways	Bootstrapping		95 % C.I.	
	Effect	SE	Lower	Upper
Direct effects				
Uniqueness → Psychological inflexibility	-.15	.06	-.26	-.02
Mindfulness → Psychological inflexibility	-.59	.04	-.67	-.49
Uniqueness → Hope	.25	.08	.01	.40
Psychological inflexibility → Hope	-.48	.06	-.60	-.36
Indirect effects				
Uniqueness → Psychological inflexibility → Hope	.07	.03	.02	.13
Mindfulness → Psychological inflexibility → Hope	.28	.05	.20	.38

The results indicated that all direct and indirect effects are significant. All in all, it can be stated that bootstrap results provide additional evidence of psychological inflexibility has a full mediator role between mindfulness and hope but a partial mediator role between uniqueness and hope.

DISCUSSION, CONCLUSION & SUGGESTIONS

In this research study, we tested two potential pathways that could enhance hope. In the first pathway, the full mediation of psychological inflexibility was revealed in the relationship between mindfulness and hope. However, in the second pathway, psychological inflexibility was partially mediated the relationship between uniqueness and hope. Thus, in this study, four hypotheses were tested for both direct and indirect relationships. The discussion on these hypotheses is given below.

The first hypothesis of the research that predicted a positive correlation between hope and mindfulness has been confirmed. This finding is consistent with the researches that reveal the positive relationship between mindfulness and hope in school counselors (Ender et al., 2019). Similarly, this research is in line with the studies which show that self-compassion, which is one of the mindfulness-related concepts, predicts hope (Yang et al., 2016). This finding also indirectly overlaps with the research findings that mindfulness decreases mind wandering (Rahl et al., 2017). Therefore, it may be inferred that it is important for hope to get rid of negative thought patterns such as rumination and regulate cognitive processes through mindfulness. Moreover, in counseling psychology students, the mediation role of hindering self-focused attention was found in the relationship between mindfulness and self-efficacy (Wei et al., 2015). Hence, in the high mindful awareness condition, people may effectively regulate attention that is focused negatively on self and find alternative ways for solutions to current problems.

The second hypothesis of the study regarding the relationship between personal sense of uniqueness and hope is confirmed. In the acceptance and action model, the absence of the ability to manage relationships is considered the main cause of psychopathology (Hayes et al., 2006). Taking this theoretical presupposition and the findings of this research into account, the development of the sense of uniqueness without experiencing a diffusion in relationships may facilitate the regulation of relationships and the development of dispositional hope.

The main hypothesis of the research that targeted to test the mediation effect of psychological inflexibility in the relationship between mindfulness, uniqueness, and hope was accepted in two different ways. The analysis showed that psychological inflexibility was a full mediator in the relationship between mindfulness and hope, but was a partial mediator in the relationship between uniqueness and hope.

According to the findings, the relationship between mindfulness and hope occurs through flexibility. In other words, mindfulness raises hope by increasing psychological flexibility. This finding makes a strong contribution to the mindfulness literature. Mindfulness refers to recognizing the emotional and intellectual experiences objectively and being able to look at them more accepting and tolerant rather than being firmly attached to them (Kabat-Zinn, 2003). In this respect, mindfulness enables individuals to appreciate all their positive and negative experiences, to live them here and now, and to increase their well-being by liberating themselves from disturbing thinking styles (Brown & Ryan, 2003). Therefore, it can be stated that there is a natural bond between mindfulness and psychological flexibility. In this respect, it is quite meaningful that mindfulness raises hope by increasing psychological flexibility in its relationship with hope. This result is consistent with research indicated that mediating role of psychological inflexibility relations between mindfulness and adaptive emotional schemas (Silberstein et

al., 2012), and the mediating role of hindering self-focused attention between psychological inflexibility and self-efficacy (Wei et al., 2015). This research is also consistent with the scholarship that psychological inflexibility has a positive relationship with mindfulness in adaptations study of psychological inflexibility scales to the Spanish culture (Flynn et al., 2016). Further, considering the research findings showing that psychological inflexibility predicts depressive symptoms (Hayes et al., 2004; Kato, 2016; Meunier et al., 2014) together with this research finding, it may be stated that psychological inflexibility is important variables besides mindfulness for hope.

Finally, the mediating role of psychological inflexibility in the relationship between sense of uniqueness and hope was partially confirmed. In other words, uniqueness predicted hope both directly and through psychological inflexibility. This finding is similar to the research that psychological inflexibility negatively predicts identity diffusion (Salande et al., 2017) as sense of uniqueness involves considering identity as valuable and autonomous. In addition, the findings of this research are indirectly in line with the studies that reveal the relationship between the sense of uniqueness and happiness (Koydemir et al., 2014) as well as subjective well-being (Demir et al., 2019). Hence, just as happiness, the sense of uniqueness is an important determinant for hope in the Turkish sample. However, the sense of uniqueness makes a partial contribution to hope through psychological inflexibility. Further research is needed to determine potential moderators and mediators of this relationship.

Conclusion and Practical Implications

The researchers proposed that mindfulness and psychological inflexibility, the concepts of the third-generation cognitive-behavioral approach, are crucial for hope. Further, the sense of uniqueness also contributed to hope. In line with these findings, counselors working with undergraduate clients may consider postulation of the third-generation cognitive behavioral approach to developing hope. Undergraduate students may be exposed to many development stages-specific stressors such as future anxiety, academic stress, and relationship problems. Additionally, as in the recent COVID-19 pandemic, a number of collective stress may be experienced for undergraduate college youth. Thus, to deal with all these individual and collective stressors, the development of hope is crucial. The findings of this study proposed that increasing mindfulness, uniqueness and decreasing psychological inflexibility are effective ways promoting hope. Accordingly, in situations where the individual or collective stress is experienced, activities fed by mindfulness and acceptance and commitment theory may be effective to increase hope. Furthermore, the existential approach to therapies may be considered important in enhancing the sense of uniqueness and hope to strengthen the value of being an autonomous agent.

Limitations and Suggestions

As with any empirical research, this study had some limitations. First, this research is cross-sectional and correlational. Experimental as well as longitudinal studies are needed to inferred cause and effect relationships. Second, this research was done in self-report methods. In future researches, the impact of state mindfulness on hope can be examined by using various mindfulness induction and psychological inflexibility priming methods. Thirdly, in this study, predictive relations between the sense of uniqueness and hope were introduced. However, further studies may concern other potential mediators such as autonomy, relational self-construal, dialectic self, self-complexity; and also, narcissism may be used as a control variable in this relationship. Finally, this research was carried out with an undergraduate sample.

The potential roles of mindfulness, psychological inflexibility, and sense of uniqueness in the therapeutic relationship may be concerned in further research.

REFERENCES

- Aspinwall, L. G., & Leaf, S. L. (2002). In search of the unique aspects of hope: Pinning our hopes on positive emotions, future-oriented thinking, hard times, and other people. *Psychological Inquiry*, 13(4), 276-288.
- Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K. et al. (2011). Preliminary psychometric properties of the acceptance and action questionnaire - II: A revised measure of psychological flexibility and experiential avoidance. *Behavior Therapy*, 42, 676-688.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822-848. doi:10.1037/0022-3514.84.4.822
- Charbonneau, D. (2019). Model of mindfulness and mental health outcomes: Need fulfillment and resilience as mediators. *Canadian Journal of Behavioural Science-Revue Canadienne Des Sciences Du Comportement*, 51(4), 239-247. doi:10.1037/cbs0000137
- Chawla, N., & Ostafin, B. (2007). Experiential avoidance as a functional dimensional approach to psychopathology: An empirical review. *Journal of Clinical Psychology*, 63(9), 871-890. doi:10.1002/jclp.20400
- Christopher, J. C. (2018). Let it be: Mindfulness and releasement—Neglected dimensions of well-being. *Journal of Theoretical and Philosophical Psychology*, 38(2), 61.
- Cohrs, J. C., Christie, D. J., White, M. P., & Das, C. (2013). Contributions of positive psychology to peace: Toward global well-being and resilience. *American Psychologist*, 68(7), 590-600. doi:10.1037/a0032089
- Crosswell, A. D., Coccia, M., & Epel, E. S. (2019). Mind wandering and stress: When you don't like the present moment. *Emotion*, 20(3), 403-412. doi:10.1037/emo0000548
- Demir, M., Haynes, A., Sanchez, M., & Parada, J. C. (2019). Personal sense of uniqueness mediates the relationship between compassion for others and subjective well-being. *Journal of Happiness Studies*, 20(6), 1751-1773.
- Demir, M., Şimşek, Ö. F., & Procsal, A. D. (2013). I am so happy 'cause my best friend makes me feel unique: Friendship, personal sense of uniqueness and happiness. *Journal of Happiness Studies*, 14(4), 1201-1224. doi:10.1007/s10902-012-9376-9
- Deng, Y.-Q., Li, S., & Tang, Y.-Y. (2014). The relationship between wandering mind, depression and mindfulness. *Mindfulness*, 5(2), 124-128. doi:10.1007/s12671-012-0157-7
- Ender, Z., Sarıçalı, M., Satici, S. A., & Eraslan-Capan, B. (2019). Is mindful awareness effective on hope, burnout and self-efficacy among school counsellors in Turkey? *British Journal of Guidance & Counselling*, 47(6), 712-726.
- Feldman, D. B., & Kubota, M. (2015). Hope, self-efficacy, optimism, and academic achievement: Distinguishing constructs and levels of specificity in predicting college grade-point average. *Learning and Individual Differences*, 37, 210-216.
- Field, A. (2009). *Discovering statistics using SPSS*. London: Sage
- Fitzgerald, C. J., & Lueke, A. K. (2017). Mindfulness increases analytical thought and decreases just world beliefs. *Current Research in Social Psychology* 24(8), 80-85.
- Flaskas, C. (2007). Holding hope and hopelessness: Therapeutic engagements with the balance of hope. *Journal of Family Therapy*, 29(3), 186-202.
- Flynn, M. K., Berkout, O. V., & Bordieri, M. J. (2016). Cultural considerations in the measurement of psychological flexibility: Initial validation of the Acceptance and Action Questionnaire-II among Hispanic individuals. *Behavior Analysis: Research and Practice*, 16(2), 81.

- Gutierrez, D. (2019). Spiritus contra spiritum: Addiction, hope, and the search for meaning. *Spirituality in Clinical Practice, 6*(4), 229-239. doi:10.1037/scp0000201
- 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. doi:10.1016/j.brat.2005.06.006
- Hayes, S. C., Strosahl, K., Wilson, K. G., Bissett, R. T., Pistorello, J., Toarmino, D., . . . McCurry, S. M. (2004). Measuring experiential avoidance: A preliminary test of a working model. *The Psychological Record, 54*(4), 553-578. doi:10.1007/BF03395492
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*, 1-55. doi:10.1080/10705519909540118
- Huen, J. M. Y., Ip, B. Y. T., Ho, S. M. Y., & Yip, P. S. F. (2015). Hope and hopelessness: The role of hope in buffering the impact of hopelessness on suicidal ideation. *PLOS ONE, 10*(6), e0130073. doi:10.1371/journal.pone.0130073
- Jimenez, S. S., Niles, B. L., & Park, C. L. (2010). A mindfulness model of affect regulation and depressive symptoms: Positive emotions, mood regulation expectancies, and self-acceptance as regulatory mechanisms. *Personality and Individual Differences, 49*(6), 645-650. doi:10.1016/j.paid.2010.05.041
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10*(2), 144-156. doi:10.1093/clipsy/bpg016
- Kagitcibasi, C. (2005). Autonomy and relatedness in cultural context: Implications for self and family. *Journal of Cross-Cultural Psychology, 36*(4), 403-422. doi:10.1177/0022022105275959
- Kagitcibasi, C. (2013). Adolescent autonomy-relatedness and the family in cultural context: What is optimal? *Journal of Research on Adolescence, 23*(2), 223-235. doi:10.1111/jora.12041
- Kato, T. (2016). Psychological inflexibility and depressive symptoms among Asian English speakers: a study on Indian, Philippine, and Singaporean samples. *Psychiatry Research, 238*, 1-7.
- Koydemir, S., Şimşek, Ö. F., & Demir, M. (2014). Pathways from personality to happiness: Sense of uniqueness as a mediator. *Journal of Humanistic Psychology, 54*(3), 314-335. doi:10.1177/0022167813501226
- Koydemir, S., Şimşek, Ö. F., Kuzgun, T. B., & Schütz, A. (2018). Feeling special, feeling happy: Authenticity mediates the relationship between sense of uniqueness and happiness. *Current Psychology, 1*-11. doi:10.1007/s12144-018-9865-z
- Larsen, D. J., Whelton, W. J., Rogers, T., McElheran, J., Herth, K., Tremblay, J., . . . Domene, J. (2020). Multidimensional hope in counseling and psychotherapy scale. *Journal of Psychotherapy Integration. doi:10.1037/int0000198*
- Latzman, R. D., & Masuda, A. (2013). Examining mindfulness and psychological inflexibility within the framework of Big Five personality. *Personality and Individual Differences, 55*(2), 129-134.
- Lazarus, R. S. (2003). TARGET ARTICLE: Does the positive psychology movement have legs? *Psychological Inquiry, 14*(2), 93-109. doi:10.1207/S15327965PLI1402_02
- Lenz, A. S. (2021). Evidence for relationships between hope, resilience, and mental health among youth. *Journal of Counseling & Development, 99*(1), 96-103.
- Ling, Y., Huebner, E. S., Liu, J., Liu, W.-L., Zhang, J., & Xiao, J. (2015). The origins of hope in adolescence: A test of a social-cognitive model. *Personality and Individual Differences, 87*, 307-311.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling, 9*(2), 151-173. doi:10.1207/S15328007SEM0902_1

- Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological methods, 18*(3), 285-300. doi: 10.1037/a0033266
- Loo, J. M., Tsai, J. S., Raylu, N., & Oei, T. P. (2014). Gratitude, hope, mindfulness and personal-growth initiative: Buffers or risk factors for problem gambling? *PloS one, 9*(2), e83889. doi:10.1371/journal.pone.0083889
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods, 1*(2), 130-149.
- Masuda, A., & Tully, E. C. (2012). The role of mindfulness and psychological flexibility in somatization, depression, anxiety, and general psychological distress in a nonclinical college sample. *Journal of Evidence-Based Complementary & Alternative Medicine, 17*(1), 66-71.
- Meunier, B., Atmaca, S., Ayranci, E., Gökdemir, B. P., Uyar, T., & Bastug, G. (2014). Psychometric properties of the Turkish version of the acceptance and action questionnaire-II (AAQ-II). *Journal of Evidence-Based Psychotherapies, 14*(2), 179.
- Meyer, E. C., La Bash, H., DeBeer, B. B., Kimbrel, N. A., Gulliver, S. B., & Morissette, S. B. (2019). Psychological inflexibility predicts PTSD symptom severity in war veterans after accounting for established PTSD risk factors and personality. *Psychological Trauma: Theory, Research, Practice, and Policy, 11*(4), 383.
- Mrazek, M. D., Smallwood, J., & Schooler, J. W. (2012). Mindfulness and mind-wandering: Finding convergence through opposing constructs. *Emotion, 12*(3), 442-448. doi:10.1037/a0026678
- Munoz, R. T., Hoppes, S., Hellman, C. M., Brunk, K. L., Bragg, J. E., & Cummins, C. (2018). The effects of mindfulness meditation on hope and stress. *Research on Social Work Practice, 28*(6), 696-707. doi: 10.1177/1049731516674319
- Nasser-Abu Alhija, F., & Wisenbaker, J. (2006). A Monte Carlo study investigating the impact of item parceling strategies on parameter estimates and their standard errors in CFA. *Structural Equation Modeling, 13*(2), 204-228.
- Özyesil, Z., Arslan, C., Kesici, S., & Deniz, M. E. (2011). The validity and reliability study of Mindful Attention Awareness Scale. *Education and Science, 36*(160), 224-235.
- Rahl, H. A., Lindsay, E. K., Pacilio, L. E., Brown, K. W., & David Creswell, J. (2017). Brief mindfulness meditation training reduces mind wandering: The critical role of acceptance. *Emotion, 17*(2), 224-230. doi:10.1037/emo0000250
- Rowland, Z., Wenzel, M., & Kubiak, T. (2018). A mind full of happiness: How mindfulness shapes affect dynamics in daily life. *Emotion, 20*(3), 436-451. doi:10.1037/emo0000562
- Salande, J. D., Hawkins, I., & Raymond, C. (2017). Psychological flexibility, attachment style, and personality organization: Correlations between constructs of differing approaches. *Journal of Psychotherapy Integration, 27*(3), 365.
- Sarıçalı, M., & Satıcı, S. A. (2017). Shyness as mediating role between mindfulness and psychological vulnerability. *Hitit University Journal of Social Sciences Institute, Year, 10*, 655-670.
- Scioli, A., Ricci, M., Nyugen, T., & Scioli, E. R. (2011). Hope: Its nature and measurement. *Psychology of Religion and Spirituality, 3*(2), 78-97. doi:10.1037/a0020903
- Singh, S., & Devender, S. (2015). Hope and mindfulness as correlates of happiness. *Indian Journal of Positive Psychology, 6*(4), 422-425.
- Silberstein, L. R., Tirsch, D., Leahy, R. L., & McGinn, L. (2012). Mindfulness, psychological flexibility and emotional schemas. *International Journal of Cognitive Therapy, 5*(4), 406-419.
- Snyder, C. R. (2000). Hypothesis: There is hope. In C. R. Snyder (Ed.), *Handbook of hope: Theory, measures, and applications*. (p. 3–21). Academic Press. <https://doi.org/10.1016/B978-012654050-5/50003-8>
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry, 13*(4), 249-275.

- Snyder, C. R., & Fromkin, H. L. (1977). Abnormality as a positive characteristic: The development and validation of a scale measuring need for uniqueness. *Journal of Abnormal Psychology, 86*(5), 518-527. doi:10.1037/0021-843X.86.5.518
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology, 60*(4), 570-585. <https://doi.org/10.1037/0022-3514.60.4.570>
- Snyder, C. R., & Lopez, S. J. (2005). *Handbook of Positive Psychology*. New York: Oxford University Press.
- Snyder, C. R., Sympson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the State Hope Scale. *Journal of Personality and Social Psychology, 70*(2), 321-335. doi:10.1037//0022-3514.70.2.321
- Sutcliffe, K. R., Sedley, B., Hunt, M. J., & Macaskill, A. C. (2019). Relationships among academic procrastination, psychological flexibility, and delay discounting. *Behavior Analysis: Research and Practice, 19*(4), 315.
- Şimşek, Ö. F., & Demir, M. (2013). Parental support for basic psychological needs and happiness: The importance of sense of uniqueness. *Social Indicators Research, 112*(3), 661-678. doi:10.1007/s11205-012-0075-z
- Şimşek, Ö. F., & Yalınçetin, B. (2010). I feel unique, therefore I am: The development and preliminary validation of the personal sense of uniqueness (PSU) scale. *Personality and Individual Differences, 49*(6), 576-581. doi:10.1016/j.paid.2010.05.006
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Allyn & Bacon/Pearson Education.
- Tarhan, S. & Bacanlı, H. (2015). Adaptation of Dispositional Hope Scale into Turkish: Validity and reliability study. *The Journal of Happiness & Well-Being, 3*(1), 1-14.
- Ward, D. B., & Wampler, K. S. (2010). Moving up the continuum of hope: Developing a theory of hope and understanding its influence in couples therapy. *Journal of Marital and Family Therapy, 36*(2), 212-228. doi:10.1111/j.1752-0606.2009.00173.x
- Wei, M., Tsai, P.-C., Lannin, D. G., Du, Y., & Tucker, J. R. (2015). Mindfulness, psychological flexibility, and counseling self-efficacy: Hindering self-focused attention as a mediator. *The Counseling Psychologist, 43*(1), 39-63. doi:10.1177/0011000014560173
- Winter Plumb, E. I., Hawley, K. J., Conoley, C. W., & Scheel, M. J. (2020). From cosmetics to compassion: A case study of goal focused positive psychotherapy. *Psychotherapy (Chicago, Ill.)*. doi:10.1037/pst0000287
- Woodruff, S., Glass, C., Arnkoff, D., Crowley, K., Hindman, R., & Hirschhorn, E. (2014). Comparing self-compassion, mindfulness, and psychological inflexibility as predictors of psychological health. *Mindfulness, 5*(4), 410-421. doi:10.1007/s12671-013-0195-9
- Yang, Y., Zhang, M., & Kou, Y. (2016). Self-compassion and life satisfaction: The mediating role of hope. *Personality and Individual Differences, 98*, 91-95. doi:10.1016/j.paid.2016.03.086

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Author Contributions

MS: Idea and design, data collection and analysis, interpretation of findings, reporting of the article.

DG: Idea and design, data collection and analysis, interpretation of findings, reporting of the article.

SA: Idea and design, data analysis, interpretation of findings, reporting of the article.

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RESEARCH

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ARAŞTIRMA

Açık Erişim

The Effectiveness of Acceptance and Commitment Therapy Based Psychoeducation Program in Reducing Fear of Negative Evaluation

Kabul ve Kararlılık Terapisi Yönelimli Psikoeğitim Programının Olumsuz Değerlendirilme Korkusunu Azaltmada Etkililiğinin İncelenmesi

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ABSTRACT

This study evaluates the effectiveness of Acceptance and Commitment Therapy (ACT) based psychoeducation program in reducing fear of negative evaluation. The study was conducted with 26 university students. 26 participants were equally assigned to research groups (experimental n=13, control n=13). An 8-week psychoeducation program was implemented. In the current study, a pretest-posttest control group design was used. The Turkish version of The Brief Fear of Negative Evaluation Scale (BFNE) was administered to experimental and control groups three times (pretest, posttest, and follow-up). According to the findings, group*time effect was found to be significant for fear of negative evaluation. The data revealed that being in different experimental conditions affects students' pre-test, post-test, and follow-up test scores differently. It was found that the ACT-based psychoeducation program has a significant effect in reducing fear of negative evaluation scores.

Article Information

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ÖZET

Bu çalışmada, Kabul ve Kararlılık Terapisi (ACT) yönelimli psikoeğitim programının olumsuz değerlendirilme korkusunu azaltmadaki etkililiği incelenmiştir. Çalışma 26 üniversite öğrencisi ile yürütülmüştür. 26 katılımcı araştırma gruplarına eşit olarak atandı (deneysel n = 13, kontrol n = 13). 8 haftalık bir psikoeğitim programı uygulanmıştır. Bu çalışmada ön test-son test kontrol gruplu desen kullanılmıştır. Olumsuz Değerlendirilme Korkusu Ölçeği Kısa Formu (BFNE) deney ve kontrol gruplarına üç kez (ön test, son test ve izleme) uygulanmıştır. Elde edilen bulgulara göre, olumsuz değerlendirilme korkusu için grup * zaman etkisi anlamlı bulunmuştur. Veriler, farklı deney koşullarında olmanın öğrencilerin ön test, son test ve izleme testi puanlarını farklı şekilde etkilediğini ortaya koymuştur. Sonuç olarak, ACT temelli psikoeğitim programının olumsuz değerlendirilme korkusu puanlarını azaltmada anlamlı bir etkiye sahip olduğu bulunmuştur.

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Ethical Statement: The study was carried out within the framework of the Helsinki Declaration and all participants whose informed consents were obtained took part in this study as volunteers. Ethics committee approval was obtained from Sakarya University Ethics Committee.

INTRODUCTION

Social anxiety disorder (SAD) leads to functional impairment in social, educational, and occupational settings, triggering poor quality of life (Dryman, Gardner, Weeks, & Heimberg, 2016). Fear of negative evaluation has been described as a core component of SAD. Fear of negative evaluation (FNE) described the nervousness and anguish arising from worries about humiliating or hostile judgment by others (Geukes, Harvey, Trezise & Mesagno, 2017). The FNE may lead to other anxieties, fears, and pathologies (Carleton, McCreary, Norton, & Asmundson, 2006).

FNE poses a serious obstacle for individuals to perform their potential and to acquire the psychological benefits of social relationships. Individuals have restrictive behaviors due to fear of negative evaluation. Individuals who are afraid of being evaluated negatively tend to stay away from social environments, to be in close contact with a limited number of people in the social network, to blame themselves (Wingo, Baldessarini & Windle, 2015). Numerous studies revealed that FNE showed overlapping relationships with some of the mental health indicators. FNE accounts for mediating the direct relationship between maladaptive perfectionism and perceived stress (Shafique, Gul, & Raseed, 2017). There is a significant relationship between FNE and excessive smartphone use and fear of missing out (Wolniewicz, Tihamiyu, Weeks, & Elhai, 2018); eating disorder (Trompeter et al., 2019), being resistant to participating in active learning activities (Cooper & Brownell, 2020), social interaction anxiety (Drummond, 2020).

There are various approaches used to reduce the fear of negative evaluation. (De Castella et al., 2015). Although cognitive-behavioral therapy is often used, the Acceptance and Commitment Therapy (ACT) called 3rd wave in behavioral therapies also suggests remarkable intervention options. ACT's roots are based on Functional Contextualism and Relational Frame Theory (RFT). In the ACT, the main aim is to increase the level of psychological flexibility of clients in the counseling (Hayes, 2019). Psychological flexibility is defined as the ability to non-judgmental contact with psychological and environmental events as they occur (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). The opposite of psychological flexibility is termed psychological inflexibility, which consists of dysfunctional control efforts of a person's thoughts, feelings, and emotions, with a tendency to avoid unpleasant internal experiences rather than meaningful values (Arslan et al., 2020; Levin et al., 2014; Tanhan, 2019).

The psychopathology view of ACT is based on RFT and clarified by the psychological inflexibility model. The psychological inflexibility characterized by six core process consists of experiential avoidance, cognitive fusion, attachment of a conceptualized self, loss of contact with the present, inaction or impulsivity, and the resulting failure to take needed behavioral steps in accord with core values (Hayes, Levin, Plumb-Villardaga, Villatte & Pistorello, 2013). According to ACT, when individuals try to avoid internal and external experiences (experiential avoidance) and try to control them, they become open to experiencing various psychological difficulties (Uğur, Kaya & Tanhan, 2020). In the current study, the FNE interventions in the group program are framed based on the psychological inflexibility model.

In the present study, the effectiveness of the ACT-oriented psychoeducation program was examined. In this context, the main hypothesis of the research was as follows;

H1: ACT-based psychoeducation program is effective in reducing the FNE levels of the participants.

METHOD

Research Model

The study was carried out with 2x3 (experimental/control groups X pretest/posttest/follow-up measurements) split-plot design. True experimental designs describe studies in which subjects are randomly assigned. The participants are randomly distributed to the experimental and control groups and the independent variable is controlled by the researcher (Büyüköztürk, 2016; Mitchell, 2015).

Table 1. The design of the study

Groups	Pretest	Process	Posttest	Follow-up test
Experimental	BFNE	ACT based psychoeducation program	BFNE	BFNE
Control	BFNE	No intervention	BFNE	BFNE

Study Group

Participants were 26 students (13 were female,13 were male) studying at Sakarya University. The process of assigning members for the experimental and control groups is described in the procedure section.

Ethical Statement

The study was carried out within the framework of the Helsinki Declaration and all participants whose informed consents were obtained took part in this study as volunteers. In addition, ethics committee approval was obtained from Sakarya University Ethics Committee (Ref: 61923333/050.99/Date:02/07/2020).

Data Collection Tools

The Turkish version of The Brief Fear of Negative Evaluation Scale (BFNE). was administered to experimental and control groups three times (pretest, posttest, and follow-up). BFNE developed by Leary (1983) and the Turkish adaptation study of the scale was carried out by Çetin, Doğan and Sapmaz (2010). The scale consists of 11 items and has a five-point Likert-type rating. According to the confirmatory and exploratory factor analysis, a single factor structure was obtained, which explained 40.19% of the total variance. In the test-retest measurement performed at two-week intervals, the correlation $r = .82$ was found. Cronbach's alpha coefficient of the scale was .84 and the split-half reliability coefficient was found .83. For the present study, the alpha coefficient was found to be .88 that indicates a good internal consistency.

The independent variable of this study is the psychoeducation program designed to reduce the fear of negative evaluation. Psychoeducation program prepared to reduce the fear of negative evaluation; It is a program consisting of 8 sessions, each session lasting 90 minutes, and one session per week. With this program, it was aimed to inform the participants about the fear of negative evaluation, to increase their psychological flexibility, to develop their awareness, to gain cognitive dissociation skills, to reveal their values, and to turn them towards their values with decisive actions. The use of acceptance as a coping strategy has been highlighted in order to cope with the fear of negative evaluation.

Program Content

The content of the program is summarized as follows: Raising mindfulness of the moment in each session; informing about ACT's view of human nature, its basic philosophy; raising awareness about the cognitive, physical, and emotional dimensions of fear of negative evaluation; dealing with dysfunctional coping behaviors involving psychological inflexibility using the creative hopelessness technique; enable participants to comprehend the relationship between cognitive fusion and fear of negative evaluation experiences; raising awareness of the importance of personal values in coping with the fear of negative evaluation; implementing the cognitive defusion interventions; enable the participants to test the effects of acceptance exercises on possible fear of negative situations via fictions.

Process

ACT-based psychoeducation program for reducing fear of negative evaluation is the independent variable, and the dependent variable is the scores obtained from The Brief Fear of Negative Evaluation Scale. In order to create a participant pool, demographic information form and The Brief Fear of Negative Evaluation Scale (BFNE) were applied to 837 students. According to the result of the preliminary analysis, the average of the scores obtained from the Short Form of Fear of Negative Rating Scale ($\bar{x} = 30.55$) and standard deviation ($sd = 8.65$) was determined. Scores received from BFNE arranged in descending order from the highest score one at the bottom. There is a risk of not observing the effect of the program on the participants for those who score lower than the scale. Considering that this will decrease the internal validity of the study, the lower 27% group was not included in the study. Individuals in the upper group of 27% who score higher on the scale may have various behavioral disorders accompanying high levels of fear of negative evaluation. Since the possibility of 27% of the upper group having abnormal behavior is higher than the middle group of 46% (Kaya, 2009), the 27% upper group was also excluded from the study. Briefly, the 27% of the group with the highest score and the 27% of the group with the lowest score were excluded to be made the study group as homogeneous as possible. (Kaya, 2009). Face-to-face and telephone interviews were carried out with individuals in the middle group outside the 27% of the group with the highest score and the 27% of the group with the lowest score. Each of the 26 persons was given a number and then participants randomly assigned to experimental and control groups by drawing lots. 8-week group program started after the groups were formed. No experimental intervention was applied to the control group. The post-test scores were calculated after the experiment, and the follow-up test scores were calculated at the end of the 3 months follow-up period.

Data Analysis

The data was analyzed by SPSS software. In order to use the parametric tests, the assumptions of normal distribution and homogeneity of the variances must be met (Delacre, Leys, Mora, & Lakens, 2019). Skewness and kurtosis coefficients were measured to test the normality assumption. The values for the skewness and kurtosis coefficients should be between -1 and 1 according to the 5% significance level (Büyüköztürk, 2016). The skewness values of the pretest, posttest, and follow-up measurements for the experimental group were found as -.476, -.598, -.389 respectively. The kurtosis values of the pretest, posttest, and follow-up measurements for the experimental group were found as -.895, -.653, -.358 respectively. The skewness values of the pretest, posttest, and follow-up measurements for the control

group were found as .110, .170, .918 respectively. The kurtosis values of the pretest, posttest, and follow-up measurements for the experimental group were found as .185, -.865, .680 respectively.

Shapiro-Wilk normality test was performed since the number of participants in the study group was less than 50 (Elliott & Woodward, 2007). Shapiro-Wilk normality test coefficients showed that there was no statistically significant difference between the distribution observed in BFNE measurements and the predicted distribution for the experimental and control groups ($p > .05$). Mauchly's Test of Sphericity was carried out to assess the validity of the sphericity assumption. The sphericity assumption was met for repeated measurements taken at different times from the BFNE scale ($W(2) = .925, p > .05$ for BFNE). In conclusion, parametric tests have been used since normality assumptions are met.

Additionally, Levene test was used to test whether there was a significant difference between the averages of the scores obtained from the BFNE at different times. It was seen that there was no difference between the pretest scores ($F = .203, p > .05$), posttest scores ($F = 3.518, p > .05$) and follow-up scores ($F = 2.459, p > .05$).

RESULTS

The main hypothesis of the study was described as 'ACT oriented psychoeducation program application is effective in reducing the fear of negative evaluation'. Variance analysis was used for repeated measures on one factor to test this hypothesis. The mean and standard deviation values of the BFNE pre-test, post-test, and follow-up test scores were calculated before ANOVA. The findings are given in Table 2.

Table 2. The descriptive data

Groups	Measurement	N	\bar{x}	SD
Experimental	Pretest	13	31.00	3.58
	Posttest	13	25.62	4.21
	Follow-up test	13	25.15	3.48
Control	Pretest	13	30.69	3.27
	Posttest	13	30.84	2.44
	Follow-up test	13	30.00	2.04

According to Table 2, it is seen that the average BFNE score of the participants decreased by 5.38 points in the post-test measurement. The decrease in BFNE scores in the experimental group continued in the follow-up measurement. The average BFNE score of the participants increased by .15 points in the post-test measurement.

Table 3. The results ANOVA for repeated measures

Source of variation	Sum of square	df	Mean of square	F	P	η^2
Between groups	894.628	25				
Intervention (Experimental/Control)	206.782	1	206.782	7.215	.013	.231
Error	687.846	24	28.660			
Within groups	279.948	52				
Time (pretest, posttest, follow-up)	155.615	2	77.808	49.543	.000	.674
Intervention*Time	124.333	2	62.167	39.584	.000	.623
Error	75.385	48	1.571			
Total	1175.576	77				

The variance analysis performed on the averages of the scores of the participants in the experimental and control groups from the pretest, posttest, and follow-up measurements of the BFNE, the intervention effect was significant ($F(1, 24) = 7.215; p < .05$).

Table 4. ANOVA results of the repetitive measurements according to Wilks' lambda test

Effect	Wilks' λ	Sd	F	p	η^2
Time	.233	2	37.767	.000	.767
Time*Intervention	.259	2	32.980	.000	.741

According to Table 4, for fear of negative evaluation over time, Wilks' $\lambda = .233$, $F(2, 48) = 37.767$; it is seen that there is a significant difference ($p < .001$). The effects of time * intervention interaction are also significant (Wilks' $\lambda = .259$, $F(2, 48) = 32.980$; $p < .001$). was significant. Compared to the control group, it was found that the BFNE levels of the participants in the experimental group showed significant changes.

In the interaction graph given in Figure 1, there was a decrease in the BFNE post-test scores for the experimental group. The measurement made at the end of the 3 months follow-up period, showed that the scores continued to decrease.

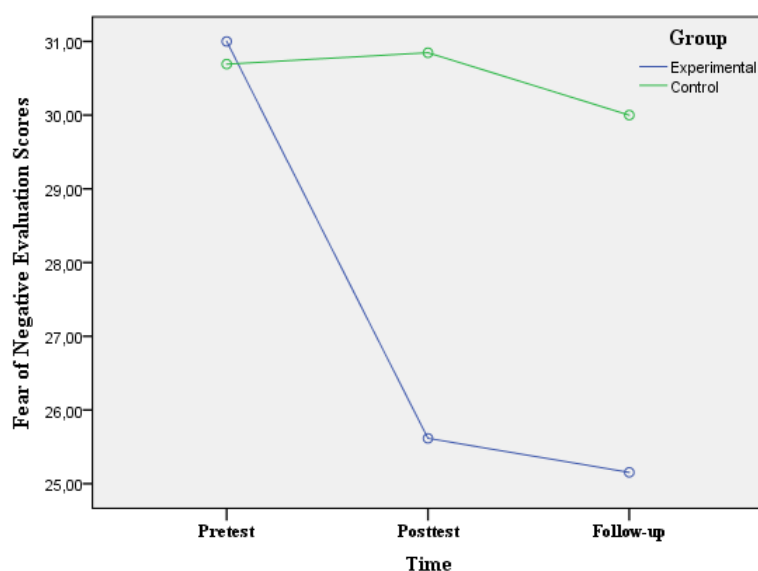


Figure 1. The graph for the mean values of pretest, posttest, and follow-up test measurements of BFNE scores in the experimental and control groups.

DISCUSSION, CONCLUSION & SUGGESTIONS

According to the findings, there was a statistically significant difference between the averages of the participants' scores obtained from the BFNE, without discriminating between the pretest, posttest, and follow-up measurements of the experimental and control groups. When the pre-test, post-test, and follow-up test scores of the experimental and control groups are examined, it is seen that the average post-test score of the participants in the experimental group is lower than the pre-test score average. In the follow-up measurement, there was a partial decrease in the mean score compared to the posttest.

When the main effect of time in the study was calculated, it was seen that there was a significant difference between all measurements made at different times. According to these data, it is seen that the effect of intervention and time is also significant. This finding indicates that being in different treatment groups

has different effects on pretest, posttest, and follow-up test scores. According to wilks' lambda coefficients, when compared to the control group, the levels of fear of negative evaluation of participants in the experimental group before and after the experimental procedure and in the 3-month follow-up period were significantly differentiated. When all findings are considered holistically, it can be said that the program is effective in reducing the fear of negative evaluation.

ACT considered as third-wave behavior therapy and offers specific intervention options for anxiety disorders. ACT emphasizes that control is a problem, and uses acceptance and cognitive defusion techniques. ACT sessions are very experiential and it is aimed to learn and realize new skills in ACT sessions (TÜRBAD, 2020). In the current study, the ACT-based program is effective in reducing FNE levels. The experiential nature of ACT may have played a facilitating role in the effectiveness of the program.

Individuals experiencing cognitive fusion avoid confronting their fears. So in this ACT-based psychoeducation program, cognitive defusion interventions were used in order to reduce the fear of negative evaluation level. Fear of negative evaluation (FNE) occurs in social environments or situations that require performance, and individuals with FNE make an effort to avoid unpleasant emotions and thoughts. In the ACT, these efforts named experiential avoidance which is defined as an attempt to change the frequency, intensity, and shape of internal experiences such as thoughts, feelings, bodily symptoms, although they are dysfunctional (Yavuz, 2015). Exercises that interfere with experiential avoidance may have contributed to the decrease in scores for fear of negative evaluation.

Limitations

There are several limitations of the current study that may provide a further extension of the research. Based on the relevant literature (Eifert, Forsyth & McKay, 2006; Habibollahi & Soltanizadeh 2016; Usta, 2017), a closed group program lasting 8 sessions and 90 minutes was preferred. In determining the participants to be assigned to the experimental and control groups, the psychological flexibility levels could be included in addition to the FNE levels. Using psychological flexibility scores in determining the participants be assigned to the experimental and control groups may contribute to the homogeneous distribution of the intervention participants. The follow-up measurement was made three months after the experimental intervention. However, in order to reveal the permanence effect of the independent variable more clearly, monitoring measurement can be made for more than 3 months. This research was carried out with individuals who have not previously had any psychiatric diagnosis. The fact that the participants are not diagnosed can be considered as a bias in the significant difference in post-test scores.

Implications and Conclusion

Although the program was implemented as a psychoeducation program, exercises that will help cognitive defusion can also be used in individual psychological counseling practices. The mindfulness exercises in the program can also be used in school counseling. Since ACT's intervention methods are convenient to integration, practitioners can use this program by integrating it with other psychological counseling approaches. The psychoeducation program can also be used as an alternative reference resource in university counseling centers and school counseling.

REFERENCES

- Arslan, G., Yıldırım, M., Tanhan, A., Buluş, M., & Allen, K. A. (2020). Coronavirus stress, optimism-pessimism, psychological inflexibility, and psychological health: Psychometric properties of the Coronavirus Stress Measure. *International Journal of Mental Health and Addiction*. <https://doi.org/10.1007/s11469-020-00337-6>
- Büyüköztürk, Ş. (2016). Deneysel desenler, öntest sontest kontrol grubu, desen ve veri analizi Ankara: Pegem Akademi Yayıncılık.
- Carleton, N., McCreary, D., Norton, P., & Asmundson, G. (2006). Brief fear of negative evaluation scale revised. *Depression and Anxiety*, 23, 297-303. doi:10.1002/da.20142.
- Cooper, K. M., & Brownell, S. E. (2020). Student anxiety and fear of negative evaluation in active learning science classrooms. In *Active Learning in College Science* (pp. 909-925). Springer, Cham.
- Çetin, B., Doğan, T., & Sapmaz, F. (2010). The Turkish adaptation of brief fear of negative evaluation scale: The validity and reliability study. *Education and Science*, 35(156), 205-216.
- De Castella, K., Goldin, P., Jazaieri, H., Heimberg, R. G., Dweck, C. S., & Gross, J. J. (2015). Emotion beliefs and cognitive behavioural therapy for social anxiety disorder. *Cognitive Behaviour Therapy*, 44(2), 128-141.
- Delacre, M., Leys, C., Mora, Y. L., & Lakens, D. (2019). Taking parametric assumptions seriously: Arguments for the use of Welch's F-test instead of the classical F-test in one-way ANOVA. *International Review of Social Psychology*, 32(1).
- Drummond, P. D. (2020). Flushing propensity predicts fear of blushing. *Motivation and Emotion*, 1-9.
- Dryman, M. T., Gardner, S., Weeks, J. W., & Heimberg, R. G. (2016). Social anxiety disorder and quality of life: How fears of negative and positive evaluation relate to specific domains of life satisfaction. *Journal of Anxiety Disorders*, 38, 1-8.
- Eifert, G. H., Forsyth, J. P. & McKay, M. (2006). *Act on life not on anger: The new acceptance and commitment therapy guide to problem anger*. New Harbinger Publications.
- Elliott, A. C. & Woodward, W. A. (2007). *Statistical Analysis Quick Reference Guidebook: With SPSS Examples*. Sage
- Geukes, K., Harvey, J. T., Trezise, A., & Mesagno, C. (2017). Personality and performance in real-world competitions: Testing trait activation of fear of negative evaluation, dispositional reinvestment, and athletic identity in the field. *Psychology of Sport and Exercise*, 30, 101-109.
- Habibollahi, A. & Soltanizadeh, M. (2016). Efficacy of Acceptance and Commitment Therapy on body dissatisfaction and fear of negative evaluation in girl adolescents with body dysmorphic disorder. *Mazandaran Uni Med Sci*, 26(134), 278-290.
- Hayes, S. C. (2019). Acceptance and Commitment Therapy: Towards a unified model of behavior change. *World Psychiatry*, 18(2), 226.
- Hayes, S. C., Levin, M. E., Plumb-Villardaga, J., Villatte, J. L., & Pistorello, J. (2013). Acceptance and commitment therapy and contextual behavioral science: Examining the progress of a distinctive model of behavioral and cognitive therapy. *Behavior Therapy*, 44(2), 180-198.
- 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.
- Kaya, M. (2009). *Üniversite adaylarının anne-babalarına uygulanan sosyal destek programının eş desteği ve adayın anne-babadan aldığı desteğe etkisi*. Yayımlanmamış doktora tezi. Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü.
- Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin*, 9, 371-376.

- 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.
- Mitchell, O. (2015). Experimental research design. *The Encyclopedia of Crime and Punishment*, 1-6.
- Sapmaz, F. (2011). *Bilişsel davranışçı yaklaşıma dayalı grupla psikolojik danışmanın sosyal anksiyete, reddedilme duyarlılığı ve kişilerarası duyarlılık üzerine etkisi*. Yayımlanmamış doktora tezi, Sakarya Üniversitesi Eğitim Bilimleri Enstitüsü.
- Shafique, N., Gul, S., & Raseed, S. (2017). Perfectionism and perceived stress: The role of fear of negative evaluation. *International Journal of Mental Health*, 46(4), 312-326.
- Tanhan, A. (2019). Acceptance and commitment therapy with ecological systems theory: Addressing Muslim mental health issues and wellbeing. *Journal of Positive Psychology and Wellbeing*, 3(2), 197-219.
- Trompeter, N., Bussey, K., Hay, P., Griffiths, S., Murray, S. B., Mond, J., ... & Mitchison, D. (2019). Fear of negative evaluation among eating disorders: Examining the association with weight/shape concerns in adolescence. *International Journal of Eating Disorders*, 52(3), 261-269.
- TÜRBAD (2020). Kabul ve Kararlılık Terapisi (ACT) hakkında sıkça sorulan sorular. retrieved from <https://www.baglamsalbilimler.org/sss/>
- Uğur, E., Kaya, Ç., & Tanhan, A. (2020). Psychological inflexibility mediates the relationship between fear of negative evaluation and psychological vulnerability. *Current Psychology*, 1-13.
- Usta, F. (2017). *Kabul ve Kararlılık Terapisi yönelimli psiko-eğitim programının ergenlerin sosyal görünüş kaygısı ve kabul ve eyleme geçme düzeylerine etkisi*. Yayımlanmamış doktora tezi. Sakarya Üniversitesi Eğitim Bilimleri Enstitüsü.
- Wingo, A. P., Baldessarini, R. J., & Windle, M. (2015). Coping styles: Longitudinal development from ages 17 to 33 and associations with psychiatric disorders. *Psychiatry Research*, 225(3), 299-304.
- Wolniewicz, C. A., Tiarniyu, M. F., Weeks, J. W., & Elhai, J. D. (2018). Problematic smartphone use and relations with negative affect, fear of missing out, and fear of negative and positive evaluation. *Psychiatry Research*, 262, 618-623.
- Yavuz, F. (2015). Kabul ve Kararlılık Terapisi (ACT): Genel bir bakış. *Türkiye Klinikleri, Special Topics*, 8(2), 21-27.

About Authors

Erol Uğur holds bachelor's, master's, and PhD degrees from Psychological Counseling and Guidance program. He is currently working as a researcher in the Department of Guidance and Psychological Counseling at Sakarya University.

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Author Contributions

EU: Idea and design, data collection and analysis, interpretation of findings, reporting of the article.

MK: Idea and design, interpretation of findings, supervising the study.

Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

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Ethical Statement

The study was carried out within the framework of the Helsinki Declaration and all participants whose informed consents were obtained took part in this study as volunteers. In addition, ethics committee approval was obtained from Sakarya University Ethics Committee.

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RESEARCH

Open Access

ARAŞTIRMA

Açık Erişim

The Content Analysis of Dissertations Completed in the Field of Guidance and Psychological Counseling

Rehberlik ve Psikolojik Danışmanlık Alanında Tamamlanan Tezlerin İçerik Analizi

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ABSTRACT

The purpose of this research is to analyse of Dissertations Completed in the Field of Guidance and Psychological Counselling (PCG) programs in Turkish Republic of North Cyprus' (TRNC) universities. In this research, the dissertations were analyzed with document analysis in terms of variables such as university, year, research topic, method, sample size, and data analysis techniques. In addition, descriptive statistics such as frequencies, percentages were also used by using SPSS-18 program. The sample of the research is the master's and doctoral theses, which give education in the field of PCG in the TRNC. These theses constitutes the examination of theses which have been complete until 2018. 168 dissertations were included in detailed analysis. As a result of the study, it was found that, mostly preferred topics in dissertations in the field of PCG until the date of 2018 are "Depression and / or Anxiety-stress", master thesis were concentrated in 2017, doctoral thesis were concentrated in 2018, the most used research method in master thesis were quantitative, and in doctoral thesis, mixed method.

Article Information

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ÖZET

Araştırmanın amacı, KKTC üniversitelerinde lisansüstü ve doktora Rehberlik ve Psikolojik Danışma (RPD) programlarında yapılan tezli çalışmalarının incelenmesidir. Tez çalışmaları, yıl, konu, örneklem grubu, yöntem gibi ölçütler çerçevesinde değerlendirilmiştir. Nitel yöntemli olan çalışmada verilerin analizinde içerik analizi kullanılmıştır. Dağılımların belirlenmesi için frekans ve yüzde istatistiği kullanılmıştır. Araştırmanın evreni, çalışma amacına uygun olarak KKTC'de RPD alanında yüksek lisans ve doktora alanlarında eğitim veren, programın açıldığı yıllardan itibaren 2018 yılı Haziran ayına kadar yapılan yüksek lisans ve doktora tezleri oluşturmaktadır. Çalışmaya 168 adet tez alınmıştır. Araştırma sonucunda, söz konusu tezlerde en çok 'Depresyon ve/veya Kaygı-stres' konularında tez yazıldığı, yüksek lisans çalışmalarının 2017 yılında, doktora çalışmalarının 2018 yılında yoğunlaştığı, yüksek lisans çalışmalarında en fazla kullanılan araştırma yönteminin nicel, doktora çalışmalarında ise karma yöntem olduğu belirlenmiştir.

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Ethical Statement: The study was carried out in 2018 and the theses were examined with the permission of the universities.

INTRODUCTION

Universities are places where science and science are spoken have been important. It provide to opportunities to individual for develop quantitative and quantitative occupational fields. With the changes and developments of science, new profession areas have born. Guidance and psychological counseling is a one of the new professional area. Guidance and Counseling services was started to operation in 1950 in Turkey. Occupation are of PCG, continues to evolve and develop until these days. PCG services, which are also needed in globalizing and changing educational processes, have increased the need for specialization and acquiring new knowledge. Guidance and Psychological Counseling services, which continue to be active as a scientific process, have become an integral part of our education in our age. This situation show that, the scientific studies should be necessity of evaluating.

The fact that, the world is in the age of rapid information and change, it requir to individuals to improve themselves and adapt to the age (Baymur, 1972). For this reason, the period of education system has gradually extended and the period of bachelor degree and postgraduate education has increased. In this process, it was seen that concepts such as master's and doctorate get importance (Karakutuk, 2002). The concept of master's degree can be defined as an academic degree between a bachelor's degree and a doctorate degree (Turk Dil Kurumu Buyuk Turkce Sozluk [TDK], 2018). The degree of doctorate, can be defined as a highest level degree, which the reached with an exam and a scientific study after a master degree (TDK, 2018). The aims of master degree programs are; to meet the needs of the developing society according to the changing conditions of today, to train workforce and brain power, to protect the culture, to raise the level of health, happiness and welfare of the society, to be able to comment and to raise modern individuals who can look at events scientifically (T.C. Higher Education Council, 2000).

It is an inevitable fact that, science is in an evolving process. Many researchers, before starting their theses or studies, search the literature by looking at what kind of studies are done. This literature searching process is especially important in determining the subject of the studies. In addition of this, categorizing the studies which have done is provide great opportunity and guidance for future studies. Especially, for originality of the studies, following the current studies is important in terms of contribution to science.

It is importance to determine the types and methods of the studies conducted over the years. Because it is provide to advance scientific research and to maintain the continuity of science. So, this study will be useful, helpful and guide to resarchers to focus on unknown areas. In TRNC, it has been determined that there are no content analysis studies on theses and articles. It is thought that, this study will set an example and leaded for new studies in TRNC. In this sense, it is important to determine the research slopes in scientific studies, conducted in the field of PCG and to reveal a healthy general appearance, to determine the areas and scientific methods of the subjects that are concentrated, to shed light on new scientific studies. Determination of non-researched will provide to literature to new information and new datas. In this way, it is thought that, necessity and suitable study area can be determined and created for the new subjects which cannot be studied.

The purpose of this research; It is aimed to examine the conducted in master and doctorate thesis studies in PCG programs in TRNC universities. This content analysis focus on the criteria such as years, subject, sample group data collection tools and methods of the theses.

METHOD

This research is a qualitative research that examines the master's and doctorate studies with thesis, which are carried out in the departments of Guidance and Psychological Counseling in universities in the Turkish Republic of Northern Cyprus. The obtained data were analyzed by content analysis, and frequency and percentage statistics were used to determine the distributions.

Research Model

The research is a descriptive research and an in-depth analysis has been made with a qualitative research method. In qualitative research, the data that are numerous in the research are examined and synthesized by coding. The content analysis method used in the analysis of data, on the other hand, enables it to be summarized and interpreted (Büyüköztürk et al., 2014). Theses were entered in the table created by the researcher in Excel. Content analysis method was used in the analysis of the data obtained and for the descriptive statistics (frequencies, percentages) were also used by using SPSS-18 program.

Study Group

The study data constitute the master's and doctoral theses in the field of PCG, which were made until June 2018, from the year the universities started to graduate in their graduate and doctoral programs. It is aimed to reach all of the studies for universe. However, there are some of theses which are not allowed to be examined by the thesis author that could not be examined. 168 theses have been taken into the study. Six of them belong to 'Eastern Mediterranean University', 12 to 'Girne American University', 24 to 'European University of Lefke', 17 to 'International Cyprus University' and 109 to 'Near East University'.

Ethical Statement

The study was carried out in 2018 and the theses were examined with the permission of the universities.

Data Collection Tool

The data were obtained from the libraries and electronic library systems from universities. "Psychology" and "Psychological Counseling" terms were searched in order to search the theses in an electronic system. Cross check provided to two-way control. Some of the theses were found to be missing as a result of this control. These missing theses were found from library and added to the study. But some of them could not be found. Because, some researchers didn't give permission to access to their research. Therefore, theses without access were not included in this research analyses for the reliability of the research.

Process

The data were collected from the libraries of universities and electronic library systems. For the reliability of the research, 16 theses -which were not open access- were not included in this study. Before the analysis, theses were categorised to the subject and created codes by the researcher for the content analysis. The purpose of creating these codes is to strengthen the validity and reliability of the research. Especially created codes are important step of the content analysis (Büyüköztürk et al, 2017).

The categories and codes which were used in the examination of the theses are given in Table 1.

Table 1. The categories and codes

Standards	Codes
Grade/class	1: Master 2: Doctorate
Subjects of Theses	1: Psychological Status 2: Attitude 3: Depression and / Or Anxiety-Stress 4: Prisoner and guilt 5: Burnout and / Or Life Satisfaction-Quality of Life 6: Addiction 7: Education Programs Activity and Methods 8: Anger Aggression Violence 9: Personal Perception-Self-Esteem and / Or Personal And Social Cohesion 10: Parent Family Marriage 11: Perception 12: Abuse 13: Conflict-Problem Solving Skills-Effective Communication-Effective Listening 14: Mourning 15: Vocational Guidance 16: Adolescence Period and / Or Development 17: Bullying and Deception 18: Awareness Level and Viewpoint 19: PCG services and / Or Prospects - Comments 20: Other Topics of Psychology 21: Suicide
Subjects of Theses (Continued)	
Methods Used	1: Quantitative 2: Qualitative 3: Mixed method
Data Collection Tools	1: Scale 2: Interview 3: Survey / Inventory and Interview 4: Survey / Inventory and Scale 5: Survey / Inventory 6: Literature Review
Universities	1: Near East University 2: Girne American University 3: European University of Lefke 4: International Cyprus University 5: Eastern Mediterranean University
Sample Groups	1: Parents and Teachers and / or School Administrators 2: Children 3: Child and Adult 4: Parents 5: Prison Inmates and Workers 6: Students and Teachers and /or School Administrators 7: Adult 8: Literature Review 9: LGBT 10: Psychological counselors and / or Psychologists 11: Soldiers

	12: University Students 13: Teachers and / or School Administrators 14: Civil Servants and Employees 15: Individuals with Anemia
Institute	1: Institute of Educational Sciences 2: Institute of Social Sciences 3: Graduate Education and Research Institute
Episode	1: Guidance and Psychological Counseling 2: Counseling Psychology

The research data which were obtained from the libraries of universities and the electronic environment were examined one by one by the researcher, created in the "Microsoft Office Excel 2007" program. These data were arranged coded in a way to include university, year, subject, method, sample groups and data collection techniques, institute and department titles. The table consists of eight basic standarts. Theses languages' are available in Turkish and English languages. Which Theses were in English, researcher was translated into the Turkish and then data was collected.

Data Analysis

For the research, "IBM SPSS 24" and "Microsoft Office Excel 2007" programs were used to analyze the data. In qualitative research, with document analysis, a large number of data are analyzed and synthesized by coding. The content analysis method used in data analysis, on the other hand, allows the data to be organized, summarized and interpreted (Büyüköztürk et al.2017). Frequency and percentage values were used in the presentation of the data. Creswell (2012) defines content analysis as organizing, interpreting and expressing data that are similar to each other with certain themes.

While categorizing the data, universities were specified as "Eastern Mediterranean University", "Girne American University", "European University of Lefke," Cyprus International University "and" Near East University ". As a section; it was included in the research as the Guidance and Psychological Counseling Department and Counseling Psychology.

Considering the thesis subjects studied in the PCG master and doctorate departments in universities, it is seen that the subject range is very wide and there are similar titles. In line with this situation, a general categorization process was made by the researcher in order to provide a clearer view on the subjects. In order to make the analysis of the data in the study meaningful, the subject headings were collected under 21 titles and named as follows.

1. General Topics According to the Categorization Process; 'perception-related issues', addiction-related issues', 'awareness level and point of view', 'conflict-problem-solving skills-effective communication-effective listening-related issues', 'depression and / or anxiety with stress related topics', 'issues related to parental family marriage', 'issues related to education programs and / or its effectiveness', 'issues related to adolescence and / or development ', 'suicide issues', 'issues related to abuse', 'personal perception-self-esteem and / or issues related to personal and social cohesion', 'prisoner and guilt-related issues', 'career guidance issues', 'anger aggression violence related issues', 'PCG services and / or expectations - issues related to opinions ', 'issues related to the psychological state ', 'issues related to other topics of psychology ', 'issues of attitude ', 'burnout and / or life satisfaction-issues related to quality of life ', 'grief issues related to ', 'bullying and intimidation "nular". Subjects under these headings are stated below. These;

1.1. The studies on Perception Related Subjects are gathered under two main headings. It consists of perceptions of sexuality and competence perceptions about PCG Department.

1.2. Subjects Related to Addiction: The codings made for collecting studies on addiction were realized under three main headings. These; substance and alcohol addiction, cigarette and alcohol addiction, technology addiction.

1.3. Studies on Awareness Level and Point of View; Counseling teachers 'awareness levels, university students' viewpoints on sexuality, opinions about counselors, awareness level of PCG employees about sexual education of autistic individuals, awareness level of counselor's professional duties.

1.4. In the category of Issues Related to Conflict-Problem Solving Skills-Effective Communication-Effective Listening; Parents' listening skills, teachers' listening skills, students' problem-solving skills, and types of conflict were taken.

1.5. Depression and / or Anxiety Issues Related to Stress; Students' depression levels, test anxiety, fear of death, anxiety, depression levels of prison inmates, perfectionism level, parental anxiety levels, self-disclosure, loneliness level of high school students, stress disorder, hopelessness, stress levels of counselors, family function and depression relationship, in boarding dormitories the remaining students' state trait anxiety levels.

1.6. Issues Related to Parents, Family, Marriage; Sexual satisfaction attachment, marital adjustment, marriage and conflict, family function, parental requirement, attachment styles to university students, mother-infant attachment, university students' spouse selection, divorce.

1.7. Issues Related to Education Programs and / or Its Effectiveness; Painting education activity, educational programs, European Union youth education programs, contemporary structuring methods, Montessori education model activity, teaching staff's ability to use verbal Judo.

1.8. Adolescence Period and / or Issues Related to Development; Investigation of effective factors and level of knowledge in adolescence.

1.9. Suicide Related Issues.

1.10. Issues Related to Abuse; Examination of child sexual abuse according to the views of psychological counselors, the effect of child abuse on the compliance in military service, the negative psychological consequences of abuse and neglect on the child, the effect of child abuse on alcohol and cigarette use in adolescents in Kkctc, evaluation of child abuse in schools according to the opinions of educators working in secondary education.

1.11. Issues Related to Personal Perception-Self-Esteem and / or Personal and Social Adaptation; Bodybuilders 'body perception, obese individuals' self-esteem, adaptation behavior, third culture self-esteem, facebook and personal perception, self-esteem, self-esteem in university students, self-efficacy, self-actualization.

1.12. Issues Related to Prison and Criminality.

1.13. Issues Related to Vocational Guidance; School Failure, Professional Maturity Level, Academic Success, School Success.

1.14. Anger Aggression Issues Related to Violence; the Effects of Type and Frequency of Computer Use on Adolescents' Anger and Aggression.

1.15. Issues Related to Psychological State; Examining the Psychological Status of 6 - 7 Years Old Students with Certain Drawing Tests, Effects of War on Psychological State, Psychological conditions of individuals with anemia, emotional intelligence,

1.16. Subjects Related to Other Subjects of Psychology; Play Therapy in Children, Positive Psychotherapy Childhood, Psychotherapy Childhood Nightmare, Effects of Imagination on Development, Examination of Emotional Intelligence and Social Skills Levels of University Students, Expanded Contact with Turkish Cypriot Children by Reading Stories.

1.17. PCG Services and / or Expectations - Issues Regarding Opinions.

1.18. Issues Related to Attitude; Parental Attitude, LGBT, Attitude Levels of Parents towards Their Children, Assessment of Information and Attitudes towards Family Counseling that Should Be Provided to Parents with Different Developing Children, Information Attitudes of Families on Behavioral Disorders of Children, Attitudes towards second foreign language, teacher candidates' attitudes towards multiculturalism.

1.19. Issues Related to Burnout and / or Life Satisfaction-Quality of Life; it covers the topics of Investigation of Burnout Levels of Academicians, Evaluation of Burnout Levels of School Psychological Counselors Working in High Schools, Quality of Life of Parents, Life Satisfaction, Burnout and Job Satisfaction in Healthcare Professionals.

1.20. Issues Related to Grief; Effects of post-loss mourning in children and adolescents with parental loss.

1.21. Issues Related to Bullying and Mobbing.

2. General Target Audiences According to the Categorization Process; While creating target audiences, those in Erikson's development periods; The category of 'Child' for 0-18 years old and 'Adult' for 19 and over is taken into consideration (Topses & Serin, 2014). Primary, secondary and high school students of unspecified age; it is specified in the "Child-Adolescent" category as a general title for target audiences under the age of 18. High school students are included in this group because they are in the specified age ranges, and a "high school" group has not been opened in order to provide a general distinction. The subject stated as literature review; it was stated that the target audience was not found in the research, but only for the researches where the source was scanned.

For civil servants and working individuals; Women working in the brothel, consomatrists, civil servants, workers and private sector employees were coded by including undergraduate and graduate students in the category of university students.

While creating the other codes of the target audience, the target groups specified in the studies were not included in any category that was used exactly. These include the areas specified by the researcher, such as teachers and school administrators, psychologists and psychological counselors, soldiers, individuals with anemia, menopausal women and cancer patients. Thus, the target audience codes of the research were determined as the following:

"Individuals with Anemia, Soldiers, Prison Inmates and Staff, Children and Adults, Children, Parents, Parents and Teachers and / Or School Administrators, LGBT, Literature Review, Civil Servants and Working Individuals, Students and Teachers and / or School Administrators', Teachers and / or School Administrators, Psychological Counselors and / or Psychologists, University Students, Adult ”.

RESULTS

In this section, the results of the analysis for the distribution of master's and doctoral theses in the field of PCG by subject titles, methods, data collection tools, sample groups, institutes, departments, universities and years are included.

Findings of PCG Master Theses

Table 2. Frequency and percentage distribution of master theses in the field of PCG

Number	Frequency	% (Percentage)
Total	147	100

When the table is 2, it is seen that a total of 147 master's thesis were written in the field of PCG in TRNC universities.

Table 3. Distribution and percentages of master theses in the field of PCG by subject

Subject	Frequency	% (Percentage)
Depression and (or) anxiety-stress	25	17,0
Conflict problem solving skill effective communication effective listening	12	8,16
Personal perception self esteem and (or) personal and social cohesion	12	8,16
Attitude	10	6,80
Burnout and (or) life satisfaction-quality of life	9	6,12
Consciousness level and way of thinking	8	5,44
Vocational guidance	8	5,44
Addiction	7	4,76
Parental family marriage	7	4,76
PCG services and (or) expectations-opinions	7	4,76
Other topics of psychology	7	4,76
Prisoner and guilt	6	4,08
Anger aggression violence	6	4,08
Abuse	5	3,40
Psychological Status	5	3,40
Training programs and (or) effectiveness-methods	4	2,72
Bullying and intimidation	4	2,72
Adolescence period and (or) development	2	1,36
Perception	1	0,68
Suicide	1	0,68
Mourning	1	0,68
Total	147	%100

When table 3 is examined, it is seen that depression/ anxiety-stress (f =25, 17%) is studied, while the second most studied subjects are personal perception self-respect and (or) personal and social cohesion, conflict problem solving ability, effective communication, effective listening (f=12, 8.16%), and the least studied subjects are master's thesis on perception, suicide and age (f=1,0.6%).

Table 4. Distribution and percentages of master theses done in the field of PCG according to their methods

Method	Frequency	%(Percentage)
Quantitative	112	76,19
Qualitative	31	21,09
Mixed	4	2,72
Total	147	%100

As shown in Table 4, it is seen that the thesis in the field of PCG Master's degree is carried out using the most quantitative (f=112, 76.94%) research method, followed by qualitative (f=31, 21.09%) and mixed (f=4, 2.72%) methods.

Table 5. Distribution and percentages of master theses done in the field of PCG according to the sample group worked

Sample Group	Frequency	%(Percentage)
University students	28	19,05
Teacher-Administrator	23	15,65
Child	23	15,65
Child-Adult	22	14,97
Literature Review	18	12,24
Parent	7	4,76
Adult	6	4,08
Officer	5	3,40
Prison-Prisoner-Employees	4	2,72
Student-Teacher-Administrator	3	2,04
Parent-Teacher-Administrator	2	1,36
Psychological Counselors	2	1,36
Soldier	2	1,36
Anemia	1	0,68
LGBT	1	0,68
Total	147	%100

As can be seen in Table 5, it is seen that the study group is mostly working with university students (f = 28, 19.05%), and then children and teacher-manager (f = 23, 15.65%) group. Anemia and LGBT (Lesbian, Gay, Bisexual, Trans) (f = 1, 0.68%) were the least studied sample group.

Table 6. Years and percentages of master theses done in the field of PCG

Year	Frequency	%(Percentage)
2003	15	10,1
2004	7	4,7
2005	9	6
2006	10	6,7
2007	5	3,4
2008	6	4
2009	6	4
2010	10	6,7
2011	7	4,7
2012	8	5,4
2013	9	6
2014	3	2
2015	7	4,7
2016	13	8,8
2017	22	14,8
2018	10	6,7
Total	147	%100

When the table is examined, it is revealed that most theses were made in 2017 ($f = 22, 14.8\%$) in the field of PCG in the TRNC, and then in 2003 ($f = 15, 10.1\%$). In 2014, it is seen that at least a master's thesis was written in the field of PCG ($f = 10, 6.7\%$).

Table 7. Distributions and percentages of master's theses in PCG according to data collection tools

Data Collection Tools	Frequency	%(Percentage)
Scale	61	41,50
Survey/Inventory	31	21,09
Interview	20	13,61
Survey/Inventory and Scale	17	11,56
Literature Review	16	10,88
Survey/Inventory and Interview	1	0,68
Survey and Scale and Interview	1	0,68
Total	147	%100

When the Table up there is examined, it is seen that the scale ($f = 61, 41.50\%$) is used as a data collection tool in master's theses, and then the use of Survey/inventory ($f = 31, 21.09\%$) comes. Survey/inventory and interview ($f=1,0.6\%$) and Survey and scale and interview ($f=1.0.6\%$) are used as the least data collection tools.

Table 8. Distributions and percentages of master's thesis in PCG by universities

University	Frequency (Number of Thesis)	%(Percentage)
NEU	100	66,4
EUL	24	16,1
AUC	12	8,1
EMU	6	5,4
CIU	5	3,4
Total	147	%100

When Table 8 is examined, it is seen that a total of 147 master theses were written in 5 universities in the field of PCG in TRNC. It is seen that PCG theses are mostly written in NEU ($f = 100, 66.4\%$), then in EUL ($f = 24, 16.1\%$) and GAU ($f = 12, 8.1\%$).

Table 9. Distributions and percentages of master's thesis in PCG by institutes

Institute	Frequency (Number of Thesis)	%(Percentage)
Institute of Educational Sciences	124	84,35%
Institute of Social Sciences	12	8,16%
Graduate Education Research	11	7,48%
Total	147	%100

The table is examined, it is seen that the highest number of master's thesis ($f = 124, 84.35\%$) in the institute of educational sciences in the field of PCG in trnc is written in the Institute of Social Sciences ($f=12, 8.16\%$), and in the graduate education research institute ($f=11, 7.48\%$).

Table 10. Distributions and percentages of master's thesis in the field of PCG by departments

Department	Frequency (Number of Thesis)	%(Percentage)
PCG	135	91,84%
Counseling Psychology	12	8,16%
Total	147	%100

When the table is examined 10, it is seen that 135 (91.84%) master's thesis were written in PCG fields in TRNC and 12 (8.16%) in the field of counseling psychology.

Findings of PCG Doctorate Dissertations

Table 11. Number and percentage of doctoral dissertations in PCG

Doctorate thesis	Frequency (Number of Thesis)	%(Percentage)
Total	21	100

Table 11 is examined; it is seen that a total of 21 doctoral thesis were written in the field of PCG in TRNC universities.

Table 12. Subjects and distributions of PhD theses in the field of PCG

Subjects	Frequency	%(Percentage)
Training programs and (or) effectiveness-methods	5	23,8
Depression and (or) anxiety-stress	3	14,3
Parent family marriage	3	14,3
Adolescence and (or) development	2	9,5
Personal perception self-respect and(or) personal and social cohesion	2	9,5
Conflict problem solving ability effective communication effective listening	1	4,8
Prisoner and guilt	1	4,8
Vocational guidance	1	4,8
PCG services and (or) expectations-opinions	1	4,8
Other topics of psychology	1	4,8
Attitude	1	4,8
Total	21	%100

Table 12 is examined, it is seen that the doctoral thesis is written on the subjects of education programs and (or) effectiveness-methods ($f = 5$, 23.8%) and then depression and (or) anxiety-stress ($f = 3$, 14.3%) and-beveyn family-marriage ($f = 3$, 14.3%). A doctoral thesis was written on attitude, conviction and guilt, personal perception self-respect and (or) personal and social cohesion, professional guidance, and other subjects of psychology ($f = 1$, 4.8%). The total number of theses is 21.

Table 13. Distributions and percentages of doctoral dissertations in the field of PCG according to their methods

Method	Frequency	%(Percentage)
Quantitative	6	28,6
Qualitative	1	4,8
Mixed	14	66,7
Total	21	%100

Table 13 is examined, it is seen that the thesis performed in the field of PCG PhD was carried out using the most mixed ($f = 14$, 66.7%) research methods, followed by quantitative ($f = 6$, 28.6%) and least qualitative ($f = 1$, 4.8%) methods.

Table 14. Distributions and percentages of doctoral dissertations in the field of PCG according to the sample group studied

Working Sample Group	Frequency	%(Percentage)
University Students	5	23,8
Child	3	14,3
Child-Adult	3	14,3
Parents	3	14,3
Adult	3	14,3
Teacher-Administrator	1	4,8
Officer	1	4,8
Prison-Inmate-Employees	1	4,8
LGBT	1	4,8
Total	21	%100

As seen in Table 14, it is seen that the most university students ($f = 5, 23.8\%$) were studied as a sample group, and then they worked with the sample group of civil servants, teachers-managers, LGBT, prison inmates-employees ($f = 1, 4.8\%$).

Table 15. Distributions and percentages of PhD thesis in PCG fields by year

Years	Frequency	%(Percentage)
2010	1	4,8
2012	1	4,8
2013	1	4,8
2014	7	33,3
2015	4	19,0
2016	2	9,5
2018	5	23,8
Total	21	%100

The table was examined, it was revealed that a doctoral thesis was written in 2014 ($f = 7, 33.3\%$) and later in 2018 ($f=5, 23.8\%$) in the field of PCG in the TRNC. In 2010, 2012 and 2013, at least a doctoral thesis was written in the field of PCG ($f=1, 4.8\%$).

Table 16. Distributions and percentages of PhD thesis in PCG according to data collection tools

Data Collection Tools	Frequency	%(Percentage)
Scale	8	38,1
Interview and Scale	5	23,8
Survey/Inventory and Scale	3	14,3
Survey/Inventory	3	14,3
Survey/Inventory and Interview	2	9,5
Total	21	%100

The table above is examined, it is seen that the most scales ($f = 8, 38.1\%$) in the field of PCG in trnc are then written doctoral thesis using scale and interview ($f=5, 23.8\%$) data collection tools. It is seen that a doctoral thesis is written using the data collection tool at least survey/inventory and interview ($f=2, 4.8\%$).

Table 17. Distributions and percentages of PhD thesis in PCG fields by universities

University	Frequency	%(Percentage)
CIU	12	57,1
NEU	9	42,9
Total	21	%100

The table 17 is examined, it is seen that a total of 21 doctoral thesis were written in 2 universities in PCG fields in TRNC. PCG theses belong to CIU($f=12,57.1\%$), NEU($f=9,42.9\%$).

Table 18. Distributions and percentages of PhD thesis in PCG by institutes

Institute	Frequency	%(Percentage)
Institute of Educational Sciences	9	42,9
Graduate Education Research	12	57,1
Total	21	%100

When the table is examined, it is seen that doctoral dissertations written in the field of PCG in TRNC are written in the Institute of Educational Sciences ($f = 9, 42.9\%$). In the Graduate Education Research Institute ($f=12, 57.1\%$), menstrual writings are seen.

Table 19. Distributions and percentages of doctoral dissertations in the field of PCG by departments

Department	Frequency (Number of Thesis)	%(Percentage)
PCG	21	100

When the table is examined, it is seen that all doctoral dissertations written in the field of PCG in TRNC ($f = 21, 100\%$) are written in the PCG section.

DISCUSSION, CONCLUSION & SUGGESTIONS

As a result of this research, the recommendations of the researcher are presented below.

1. In this study, the percentage and frequency values were looked at in this study where the content analysis of master's and doctoral thesis in the field of guidance and psychological counseling was carried out in TRNC universities. Meta-analysis of subsequent studies can be recommended to researchers.
2. In the research, which mentions variables such as year, university and method of master's and doctoral dissertations in the field of guidance and psychological counseling in TRNC universities, only one variable can be addressed and more detailed in-depth researches can be done.
3. It is very important to have both content and meta-analysis studies on theses, especially in universities in TRNC, in terms of determining research topics that will shed light on the field and especially many researches. It may be offered to increase research in this field.
4. Not all thesis can be found in the libraries of TRNC universities. There are theses reached by the researcher from the Institutes. It can be recommended to classification thesis in library systems with a more systematic edit.

In this study, the subtleties and subtleties of master's and doctorate in PCG in TRNC:

When we look at the master's studies conducted in the field of PCG in universities in TRNC, it is seen that the university with the highest number of thesis is Near East University with 100 thesis ($f = 100, 66.4\%$). Since Near East University is older than other universities in trnc as its founding year, it is a foreseeable result that the number of thesis is high. 'Lefke European University' ranks second with 24 master's thesis ($f=24, 16.1\%$).

When we look at the distribution of theses according to their years, it is seen that master's studies were concentrated in 2017, while doctoral studies were concentrated in 2014 with 33.3% and 23.8% in 2018. It is seen that the master's thesis numbers made in 2011-2013 have an equal and balanced distribution with 4.8%. In 2018, 23.8% and 5 doctoral thesis were found in universities in TRNC. However, given that 2018 is an ongoing year, it is predicted that master's and doctoral dissertations may increase. In this

case, we can say that there has been an increase in master's and doctoral thesis studies and this increase will continue. With the 'Examination of Master's Thesis in The Field of Measurement and Evaluation in Education' conducted by Senyurt and Ozkan (2017), it is seen that the thesis in the field of measurement and evaluation in Turkey was high between 2009 and 2012 and gradually decreased towards the last years, while on the contrary, master's thesis in the field of PCG in TRNC increased between 2015 and 2016.

While 76.1% of the theses studied were master's thesis using quantitative method, it is seen that master's researches conducted using mixed method were used less than quantitative method with 2.7%. In Doctoral studies, it is seen that the usage rates of mixed methods with 66.7% and quantitative methods with 28.6% are high. Therefore, we can see that the mixed research method is more preferred in doctoral studies. Ozan and Kose (2014) found that quantitative method is the most used research method in their research (81.5%) in which they examined 'Research Trends in Education Programs and Education'. Arık and Turkmen (2009) also indicated that quantitative research methods were used more (68%) in their studies. Keldal and Bİlge (2016) In their content analysis study on 'Mixed Method Research in the Field of Psychological Counseling and Guidance', they examined the mixed-method researches published in five journals within the scope of SSCI and SCI-E in Turkey between 2010 and 2015 with the method of content analysis and stated that the use of the mixed method in articles in the field of psychological counseling and guidance was low. With the 'Examination of Master's Thesis in The Field of Measurement and Evaluation in Education' conducted by Senyurt and Ozkan (2017), it is seen that quantitative methods are used in the field of measurement and evaluation in Turkey, while the thesis made in the field of PCG in TRNC has a high quantitative weight.

When we look at the institutes of master's studies, it is seen that the Faculty of Education has a rate of 84%. The lowest (8.1%) percentage is found to belong to the Graduate Education Institute. For doctoral dissertations, it is seen that the Graduate Education and Research Institute, i.e. 57.1%, has the majority of the percent. In the study carried out by Arık and Turkmen (2009), the 2008 issues of four different journals of educational sciences were scanned in SSCI. As a result of the research, it was determined that the most studies were carried out in the field of 'Educational Technologies' and then in the field of 'Guidance and Psychological Counseling'. In 2012, Goktas and others' study on 'Trends in Educational Research in Turkey' revealed that one of the areas studied mainly is the field of 'Guidance and Psychological Counseling'.

When we look at the sampling groups of master's thesis; the most preferred sample group is 'University Students' (19.05%). It is then seen that there are 'Child' and 'Teacher and/or Administrator' working groups representing the age range of 15.6% to '0-18'. 'LGBT' and 'Anemia individuals' have the lowest rates. Senyurt and Ozkan (2017) 'Students are the most preferred target audience in the research on the Thematic and Methodological Examination of Master's Thesis in the Field of Measurement and Evaluation in Education. It has been determined that the use of 'graduate students' as a target audience is low. In the research they examined the research trends in the Journal of Counselling Psychology with the Turkish Journal of Counseling and Guidance conducted by Guven et. al. in 2018; the most used target audience was found to be children, adults and university students. In the study carried out by Arık and Turkmen (2009), it was determined that the application areas were high among university students in the study called 'Review of Articles in Scientific Journals Published in the Field of Educational Sciences'.

According to the subjects of the study, it was determined that the most studied subject was 'Depression and/or Anxiety-stress'. In the research conducted by Guven et. al. in 2018, they examined the research

trends in the Journal of Counselling Psychology with the Turkish Journal of Psychological Counseling and Guidance and found that the most studied topics related to depression were the issues related to depression. The results of the research coincide.

As a result, when we look at the thesis made in the field of TRNC PCG, it is seen that the subjects studied are concentrated in some areas and the methods usually used in Master's thesis are quantitative or qualitative studies and mixed patterns are not included. It is seen that the published theses usually belong to 'Near East University'.

For this research, the results of the study were wanted to be compared, but since there was no similar research on this subject in the TRNC, the findings were discussed with studies conducted in TC and abroad. It is indicated that the compared results are similar to other studies and other data obtained.

It is thought that this research topic will be an example of other studies to be carried out on similar issues and provide more information to the field.

Suggestions

In this study, the percentage and frequency values were looked at in this study where the content analysis of master's and doctoral thesis in the field of guidance and psychological counseling was carried out in TRNC universities. Meta-analysis of subsequent studies can be recommended to researchers.

Again, in the research, which mentions variables such as year, university and method of master's and doctoral dissertations in the field of guidance and psychological counseling in TRNC universities, only one variable can be addressed and more detailed in-depth researches can be carried out.

REFERENCES

- Arık, R. S., & Türkmen, M. (2009, Mayıs). *Eğitim bilimleri alanında yayımlanan bilimsel dergilerde yer alan makalelerin incelenmesi*. I. Uluslararası Türkiye Eğitim Araştırmaları Kongresi'nde sunulan sözel bildiri, 1-3 Mayıs, 2009, Çanakkale.
- Baymur, F. B. (1972). *Genel Psikoloji (Gözden geçirilmiş 15. Baskı)*. İstanbul: İnkılap Yayınevi.
- Büyüköztürk, Ş., Çakmak, E.K., Akgün, Ö.E., Karadeniz, Ş., & Demirel, F. (2014). *Bilimsel Araştırma Yöntemleri (Geliştirilmiş 17. baskı)*. Ankara: Pegem Akademi.
- Creswell, J. W. (2012). *Research design: Qualitative, quantitative, and mixed methods approaches* (4. bs.). United States: Pearson Education.
- Göktaş, Y., Hasançabi, F., Varışoğlu, B., Akçay, A., Bayrak, N., Baran, M., & Sözbilir, M. (2012). Trends in Educational Research in Turkey: A Content Analysis. *Educational Sciences: Theory & Practice*, 12(1), 455-459.
- Güven, M., & Aslan, A.M. (2018). Psikolojik danışma ve rehberlik alanında Türkiye'deki bilimsel dergilerde yayınlanan makaleler üzerine bir inceleme, *Uluslararası Sosyal Araştırma Dergisi*, 11(55), 594-603.
- Karakütük, K. (2002). *Öğretim üyesi ve bilim insanı yetiştirme lisansüstü eğitimin planlanması (Geliştirilmiş 2.baskı)*. Ankara: Anı Yayıncılık.
- Keldal, G., & Bilge, F. (2016). Psikolojik danışma ve rehberlik alanında karma yöntemli araştırmalar: Bir içerik analizi çalışması. DOI: <http://dx.doi.org/10.14527/9786053183563.03>. (Erişim tarihi: 25 Mayıs 2018)
- Ozan, C., & Köse, E. (2014). Eğitim programları ve öğretim alanındaki araştırma eğilimleri. *Sakarya Üniversitesi Eğitim Dergisi*, 4(1), 117-130.
- Şenyurt, S., & Özkan, Y.Ö. (2017). Eğitimde ölçme ve değerlendirme alanında yapılan yüksek lisans tezlerinin tematik ve metodolojik açıdan incelenmesi. *Elementary Education Online*, 16(2), 643-645, doi: 10.17051/ilkonline.2017.304724.
- TC Yüksek Öğretim Kurulu. (2000). *Türk yükseköğretiminin bugünkü durumu*. Ankara.
- Topses, G., & Serin N. B. (2014). *Psikolojik danışmanlık ilke ve teknikleri*. Ankara: Nobel.
- Türk Dil Kurumu Büyük Türkçe Sözlük.
http://www.tdk.gov.tr/index.php?option=com_bts&view=bts&kategori1=veritbn&kelimesec=352319 (Erişim tarihi : 27 mart 2018).

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Author Contributions

This study was conducted by all the authors working together and cooperatively. All of the authors substantially contributed to this work in each step of the study.

Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

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RESEARCH

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ARAŐTIRMA

Aık EriŐim

The Role of Academic Motivation in Predicting Turkish Undergraduates' Life Satisfaction and Academic Procrastination

Trk niversite đrencilerinin YaŐam Doyumları ve Akademik Ertelemelerini Belirlemede Akademik Motivasyonun Rol

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ABSTRACT

The present study aims to determine the motivational profiles of university students through a person-centered approach and to examine the relationship between motivational profiles, academic procrastination, and life satisfaction. The study participants comprised 1,770 undergraduates (1019 female, 749 male, and 2 not specified), who were categorized into three main profiles: (a) students with high levels of both intrinsic and extrinsic motivation but with a low level of amotivation (33.8%), those with a "high-level academic motivation profile"; (b) students with moderate levels of both intrinsic and extrinsic motivation but with low levels of amotivation (44.9%), those with a "medium-level academic motivation profile"; and (c) students with low levels of both intrinsic and extrinsic motivation with high levels of amotivation (21.3%), those with a "low-level academic motivation profile. The results of this study revealed that students with a high-level academic motivation profile have a high level of life satisfaction and a low level of academic procrastination. The results also show that students with medium-level academic motivation profiles have higher levels of life satisfaction than students with low-level academic motivation profiles. However, the academic procrastination level of students with medium-level academic motivation was found to be lower than that of students with a low-level academic motivation profile.

Article Information

Keywords

Academic Motivation
Motivational Profiles
Self-Determination Theory
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ZET

Bu araŐtırmanın amacı birey merkezli yntem ile niversite đrencilerinin motivasyon profillerini belirlemek ve bu profiller ile akademik erteleme ve yaŐam doyumları arasındaki iliŐkiyi incelemektir. Bu alıŐmanın katılımcıları olan 1770 niversite đrencisi (1019 kadın, 749 erkek and 2 belirtmemiŐ), Őu  profile ayrılmıŐtır: (a) hem isel hem de dıŐsal motivasyon dzeyleri yksek fakat motivasyonsuzluk dzeyleri dŐk đrencilerden oluŐan (%38) "yksek dzeyde motivasyonlu profil" (b) hem isel hem de dıŐsal motivasyon dzeyleri orta dzeyde olan fakat motivasyonsuzluk dzeyleri dŐk olan đrencilerde oluŐan (%44.9) "orta dzeyde motivasyonlu profil", (c) hem isel hem de dıŐsal motivasyon dzeyleri dŐk fakat motivasyonsuzluk dzeyleri yksek đrencilerden oluŐan (%21.3) "dŐk dzeyde motivasyonlu profil". Bu alıŐmanın sonuları, yksek dzeyde motivasyonlu profildeki đrencilerin yksek dzeyde yaŐam doyumunu ve dŐk dzeyde akademik erteleme gsterdiđini ortaya koymuŐtur. Sonular ayrıca orta dzeyde akademik motivasyonlu profildeki đrencilerin, dŐk dzeyde motivasyonlu profildeki đrencilere gre daha yksek dzeyde yaŐam doyumuna sahip olduđunu gstermiŐtir. Ayrıca orta dzeyde motivasyonlu profildeki đrencilerin akademik erteleme dzeylerinin dŐk dzeyde motivasyonlu profile yer alan đrencilere gre daha dŐk dzeyde olduđu bulunmuŐtur.

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INTRODUCTION

Academic Motivation

Self-Determination Theory (SDT) (Deci and Ryan, 1985) posits that motivation is a multidimensional structure that includes different types and qualities of motivational states. This assumption undoubtedly applies to academic motivation which is defined by a student's desire regarding academic subjects when the student's competence is judged against a standard of performance or excellence" (McClelland, et al.,1953). The theory divides motivation into unitary intrinsic motivation (IM), four types of extrinsic motivation (e.g., integrated regulation (EMIN), identified regulation (EMID), introjected regulation (EMINT), external regulation (EMER), and amotivation (AMOT). Deci and Ryan (1985) ranked these motivational orientations on a scale, called the motivation continuum, from the most autonomous motivation (IM) to a state of amotivation (AMOT) (Deci and Ryan, 2008; Can, 2015). However, Vallerand et al. (1989) took Deci and Ryan's classification of motivation (1985) in terms of academic motivation and divided intrinsic motivation into three equally autonomous sub-motivations (Intrinsic motivation to know (IMTK), Intrinsic motivation to accomplish (IMTA), and Intrinsic motivation to stimulation (IMTS). They also removed the integrated motivation (EMIN) from the motivation continuum (Ryan and Deci 2000b; Can 2015).

SDT differentiates the motivational orientations in respect to their quality; as autonomous and controlled motivations. Behaviors directed by IMTK, IMTA, and IMTS are considered to be fully autonomous, while behaviors directed by EMID are considered partly autonomous. On the other hand, behaviors directed by EMINT and EMER are assumed to be controlled. AMOT refers to an absence of motivation.

"The IMTK is to do something for pleasure while one is learning, exploring, or creating something new. For example, if a student derives pleasure while doing homework, the motivation inspired by the student will be IMTK. The IMTA describes an individual who derives satisfaction while he is accomplishing something. For example, students who solve extra mathematics problems, even though they are not required to do so, display IMTA. In describing the IMTS, it would be acceptable to offer that it is the behavior carried out to observe and experience stimulating sensations as the consequences of activities being engaged in (Cokley, 2000). For instance, a driver exceeding the speed limit to experience stimulating emotions displays an IMTS" (Can, 2015, pp. 389).

EMID is about behaviors done to get positive results. When a student finds an academic activity valuable and important, the motivational orientation of that student will be EMID. "EMINT refers to doing something to maintain high self-esteem or a sense of pride, or to avoid guilt or anxiety, and external regulation pertains to a behavior that is performed because of an external demand or possible reward" (Altıntaş et al., 2018). When a student internalizes and finds value in participating in an educational activity voluntarily, EMINT occurs. When activities that are to be completed are perceived as worthless by individuals, or when individuals believe themselves to be inadequate to do those activities, amotivation occurs. Amotivation, which is the final motivational state of SDT, is neither autonomous nor controlled; rather it refers to a lack of motivation (Can, 2015; Vallerand et al., 1992).

Although SDT differentiates motivation into different types of sub-motivations, some researchers (Deci and Ryan, 2012; Hayenga and Corpus 2010; Ratella et al. 2007) emphasize that intrinsic and extrinsic motivation may work together and that different motivational orientations may exist simultaneously within an individual. Accordingly, students in a population may have several sub-motivations at different

levels at the same time. Thus, students who display similar sub-motivations can be included in the same motivation cluster. Thus, several clusters of motivations can be obtained from a population at the same time.

According to SDT, if the motivational orientation of an individual is autonomous, the resultant variable associated with it will be more positive (Deci et al., 1991; Ryan and Deci, 2009). The results of those studies that use both the variable-centered method (Bishop, 2010; Guo, 2018; Krapp et al., 1992; Martn-Albo et al., 2012; Vallerand et al., 1997; Vansteenkiste et al., 2005) and the person-centered method (Boich and Stephan, 2014; Hayenga and Corpus, 2010; Schunk et al., 2013; Vansteenkiste et al., 2009; Wormington et al., 2012) also support this view. Of these studies, the only research that tested the relationship between motivation profiles and academic procrastination that could be found was conducted by Vansteenkiste et al. (2009). However, no studies could be found in the literature that tests the relationship between motivation profiles and life satisfaction.

Academic Procrastination

Academic procrastination, which is a particularly common problem among university students, is defined as the deferment of academic tasks in an unreasonable manner until the deferment leads to high levels of anxiety (Solomon and Rothblum, 1984). Academic procrastination, as a negative tendency or personality trait, is positively associated with undesirable cognitive, behavioral, and emotional outcomes, such as ineffective time-management (McCown, Petzel, and Rupert, 1987), difficulty concentrating (Balks et al., 2006), a low sense of responsibility (zer and Altun, 2011), academic failure (Onwuegbuzie, 2004; Steel, 2007), low self-esteem (Aydođan and zbay, 2012), and anxiety (Onwuegbuzie, 2004). Additionally, extrinsic academic motivation is a negative predictor of academic procrastination (Solomon and Rothblum, 1984; Onwuegbuzie, 2004; Kađan, 2009). According to Tuckman and Sexton (1989), procrastination is the lack or absence of self-regulated performance.

Although several studies in the literature report that autonomous academic motivation reduces academic procrastination (Brownlow and Reasigner, 2000; Katz, Elliot, and Nevo, 2014), only one study could be found (Vansteenkiste et al., 2009) that examines the relationship between academic motivation profiles of college students and their academic procrastination behavior. In their study, Vansteenkiste et al. (2009) report that the study participants were clustered into four different profiles: a good-quality motivation profile (i.e., high autonomous, low controlled), a poor-quality motivation profile (i.e., low autonomous, high controlled), a low-quantity motivation profile (i.e., low autonomous, low controlled), and a high-quantity motivation profile (i.e., high autonomous, high controlled). Among these, those students in the good quality motivation group displayed the least procrastination behavior when compared with students in all other motivation group profiles. Even if this study shows a negative relationship between autonomous motivation profiles and academic procrastination, findings obtained from similar future researches would be beneficial in further clarifying this matter.

Life Satisfaction

Academic life is an important variable that affects life satisfaction (Chow, 2005; Powers, 2008). Life satisfaction, which is a different but closely related concept to that of motivation (Deci and Ryan, 2000), is defined as "the cognitive aspect of subjective well-being and refers to people's evaluation of the quality of their life" (Peterson, Park, and Seligman, 2005). According to Myers and Diener (1995), life satisfaction is the evaluation of one's own life according to their own criteria. This evaluation is an assessment that

includes current living conditions, in addition to past and future states (Diener and Lucas, 1999). Like positive affect (experiencing positive emotions) and negative affect (experiencing negative emotions), life satisfaction is also one of the main indicators of well-being (Diener, 1985). On the other hand, life satisfaction is one of the resultant variables of intrinsic motivation (Guo, 2018) and well-being (Burton et al., 2006). Deci and Ryan (2000) state that when an individual's level of intrinsic motivation increases, their life satisfaction, and well-being also increase. Similarly, Jimnez et al. (2010) revealed that moving from extrinsic to intrinsic motivation has a statistically significant effect on life satisfaction. Additionally, other studies (Burton et al., 2006; Deci and Ryan, 2000; Niemiec et al., 2006; Martin–Albo et al., 2012) have revealed that that intrinsic motivation positively correlates with well-being and life satisfaction. However, findings obtained from studies investigating the relationship between extrinsic motivation and life satisfaction are inconsistent with one another. For example, Mafini et al. (2014) found a positive relationship between extrinsic motivation and life satisfaction, while Bhat and Naik (2016) and Batista et al. (2016) found negative relationships between the same variables. Furthermore, Kwok et al. (2013) suggest that extrinsic motivation is not related to life satisfaction, while Gillet et al. (2012) state that negative affect—one of the indicators of well-being—is positively affected by controlled motivation and amotivation.

Although some researchers (Graves et al., 2015; Liu et al., 2009; Ratelle et al., 2007; Van den Broeck et al., 2013; Vaters, 2015) have tested the relationships between motivational profiles and some of the variables that related to well-being, no studies could be found from the literature directly investigate the relationship between life satisfaction, and motivation profiles. This gap in the research regarding the relationship between motivation profiles and life satisfaction can be addressed by future research findings, which will also serve to clarify this subject area.

Current Study

This research aimed to determine the academic motivation profiles of university students and to examine the relationship between emerging profiles and the academic procrastination and life satisfaction of the participants. There is no research on the motivation of the academic profile of university students in Turkey. Moreover, in only a few of the studies conducted to determine motivation profiles in different cultures (Boich and Stephan, 2014; Ratella et al., 2007), intrinsic motivation, all dimensions of extrinsic motivation, and amotivation are included in cluster analysis. The motivation was mostly analyzed as autonomous-controlled or internal-external dimensions in the studies. As for this study, seven dimensions of academic motivation were included in cluster analysis. In this respect, the study provided an opportunity to see the academic motivations of students that they exhibit naturally in detail. Besides, it also provided a chance to analyzed the relationship of academic motivation profiles with both variables at the academic level (academic procrastination) and variables at the general level (psychological life satisfaction). In this study, the findings of studies revealing that psychological need satisfaction was an important variable in life satisfaction (Cihangir ankaya, 2009; Deci and Ryan, 2000; Elliot, Sheldon and Church, 1997; İlhan and zbay, 2010) were taken into consideration and psychological need satisfaction was determined as the control variable. Thus, an important variable that could be effective in the relationship between life satisfaction and academic motivation is checked. The study is informative about the validity of Self-Determination theory in Turkish culture.

METHOD

Research Model

This research is a correlational survey model. In this research aims to describe the academic motivation profiles of university students and reveal the relationships between their academic motivation profiles with gender, perceived academic achievement, academic procrastination, life satisfaction, and basic psychological satisfaction.

Study Group

The study participants included a total of 1,770 students, 749 (57.6%) male, 1,019 (42.3%) female, and two (1%) students who preferred not to specify their gender. All these student participants attended Anadolu University in Turkey at the time this study was conducted. These students comprised 501 freshmen (28.3%), 528 sophomore (29.8%), 377 junior (21.3%), and 359 senior (20.3%) students.

Ethical Statement

The study was carried out within the framework of the Helsinki Declaration and all participants whose informed consents were obtained took part in this study as volunteers. In line with this, the study was investigated and permitted by Anadolu University Scientific Research and Ethical Review Board (REF: 17031-16.09.2013). Required permits were obtained to use the scales in this study. The participants were informed of the goals of the project and they were told that their identities would be kept confidential.

Data Collection Tools

The Turkish versions of the Academic Motivation Scale (AMS) (Can, 2012), the Tuckman Procrastination Tendency Scale (TPTS) (Uzun-zer, Sakes, and Tuckman, 2013), and the Life Satisfaction Scale (SWLS) (Yetim, 1993) were used to collect the study data.

Academic Motivation Scale (AMS). The English version of the original Scale, the AMS (Vallerand et al. 1992), is called the "Echelle de Motivation en Education" in French (Vallerand et al., 1989). The AMS is a 28-item Likert - type scale. The Scale comprises seven sub-scales that assess amotivation (AMOT), three ordered types of extrinsic motivation (EMER, EMIN, EMID), and three types of unordered intrinsic motivation (IMTK, IMTA, IMTS). The confirmatory factor analyses (CFA) conducted by Can (2012) using 797 Turkish university students revealed acceptable fit values for the scale (CFI = 0.92, SRMR = 0.120.062, NNFI = 0.90, GFI = 0.89, AGFI = 0.86, RMSEA = 0.064), which confirmed the scale's construct validity. The Cronbach's alpha values of the AMS subscales ranged between 0.71 and 0.84. In the present study, Cronbach's alpha were .81 (for knowing), .84 (for accomplishment), .81 (for experiencing sensations), .71 (for external regulation), .83 (for introjected regulation), .73 (for identification) and .83 (for amotivation).

Tuckman Procrastination Tendency Scale (TPTS). The scale was developed by Tuckman (1991) to measure college students' procrastination tendencies regarding academic behavior. The original version of the TPTS is a one-dimensional Likert-type scale comprising 16 items. The lowest total score possible from the scale is 16, while the highest is 80. The high scores obtained from the scale indicate a high procrastination level. Uzun-zer, Sakes and Tuckman (2013) who performed the Turkish version of the scale, reported that CFA results showed perfect fit indices (RMSEA = 0.056, CI = 0.047-0.064; GFI

= 0.99, CFI = 0.98). They also calculated the Cronbach's alpha value of the scale to be .080. Cronbach's alpha was .89 in this study.

The Life Satisfaction Scale (SWLS). The Life Satisfaction Scale was developed by Diener et al. (1985) to measure general life satisfaction. In the original version of the scale, Diener et al. (1985) found the criterion validity of the SWLS to be 0.82 and Cronbach's alpha reliability of the SWLS to be 0.87. The adaptation of the Scale into Turkish, Yetim (1993) found the convergence validity of the scale to be .40 and reported that the Turkish version of the scale, which showed a single factor structure as the original scale, explained 38% of the total variance. In the present study, Cronbach's alpha was .83.

Need Satisfaction Scale. The scale was developed by Deci and Ryan (1991) to determine the level of satisfaction derived from basic psychological needs (need for competence, need for connection, and need for autonomy). The Likert-type scale, which is composed of 21 items, consists of three subscales to measure the needs of competence, connection, and autonomy. The height of the scores obtained from the subscales indicates that the satisfaction level of the psychological need it belongs to also increases. A total score is obtained from the scale, and the height of the score indicates that general need satisfaction also increases. Bacanlı and Cihangir-Çankaya (2003) who performed the Turkish version of the scale, reported that Turkish version of the NSS has acceptable validity (RMSEA = 0.07, CI = 0.86; AGFI = 0.82, CFI = 0.82) and reliability (Cronbach's alpha: .83). In the present study, Cronbach's alpha was .85..

Data Collection and Analysis

For the analysis of the study data, students' motivation profiles were determined using two stages of cluster analysis, depending on those z scores obtained from the AMS subscales. First, the metrics, outliers, multicollinearity, and the prerequisites of the cluster analysis (Hair et al., 1998) were examined. For the first stage of the cluster analysis, Ward's Linkage Clustering Method and the Squared Euclid distance method were used. For the second stage of the cluster analysis, a non-hierarchical cluster analysis was performed using the K-means clustering method. The stability of clusters was examined through the double-split cross-validation procedure (Vansteenkiste et al. 2009). The data set was then randomly divided into two subgroups, and both hierarchical and non-hierarchical cluster methods were separately applied to each of the sub-groups. Subsequently, the cluster centers obtained within each sub-group were designated as cluster centers for the other sub-group. Reanalysis was performed, and Cohen's kappa value was calculated for the results of each of the clusters obtained. One-way ANOVA was used to determine whether students' psychological need satisfaction scores and academic procrastination scores differ significantly according to students' academic motivation profiles. First, the prerequisites of this test, normality, and variance homogeneity were analyzed. Subsequently, the relationship between students' life satisfaction and academic motivation profiles was examined using one-way ANCOVA, controlling for students' psychological need satisfaction levels; before this performing, this analysis, normality, linearity, variance homogeneity equivalent of intragroup regression tendencies were also analyzed.

RESULTS

Preliminary Analyses

Before conducting the cluster analysis, 76 univariate outliers (values greater than $M \pm 3 SD$) and 13 multivariate outliers (Mahalanobis distance values over 24.32; $p < .001$) were removed from the data set. Then, the relations between the AMS subscales were analyzed to determine multicollinearity, if any, between variables. Findings from the analysis are presented in Table 1.

Table 1. Results of correlation analyses between subscales of AMS

Variables	1	2	3	4	5	6	7
1. Intrinsic motivation to know	-	.70*	.64*	.47*	.38*	.07*	-.33*
2. Intrinsic motivation to accomplish	-	-	.67*	.44*	.57*	.12*	-.21*
3. Intrinsic motivation to experience sensations	-	-	-	.34*	.43*	-.01*	-.11*
4. Identified regulation	-	-	-	-	.43*	.52*	-.33*
5. Introjected regulation	-	-	-	-	-	.34*	-.05*
6. External regulation	-	-	-	-	-	-	-.12*
7. Amotivation	-	-	-	-	-	-	-
<i>M</i>	20.82	17.40	15.42	22.07	16.27	22.08	7.07
<i>SD</i>	5.04	5.82	5.63	4.28	6.40	4.60	4.23

As it is seen in Table 1, correlation values vary between -.33 and .70 among motivation types. It is seen that the highest relationship between motivation types is between intrinsic motivation to know and intrinsic motivation to accomplish ($r = .70$). It is also seen that the lowest relationship is between introjected regulation and amotivation ($r = -.05$). Additionally, both intrinsic and extrinsic motivation types show negative relationships with amotivation and these relationships vary between -.33 and -.05. This analysis showed that the variables were free of the multicollinearity problem.

Cluster Analysis

Once the prerequisites of the cluster analysis were provided, a hierarchical cluster analysis was performed depending on z scores obtained from the AMS subscales. To determine the number of clusters in the first stage of cluster analysis, the algorithm list, which was obtained from the study, was analyzed and breakages between cluster distances were examined. As a result of this analysis, the largest breakage in the distance between the clusters was found in the second cluster, with a 35% change in heterogeneity. As stated by Hair et al. (2016), it was thought that it would not be possible to suggest that two clusters would emerge at the end of the analysis merely by looking at this natural change between the first and the second cluster. Therefore, heterogeneity changes in clusters 3 and 4 were also examined, which revealed that changes in this stage were also high (the changes in the 3rd and 4th clusters were 14% and 12%, respectively). Considering these findings, it was decided that the hierarchical cluster analysis indicated that the scores obtained from AMS showed three clusters.

In the second stage, non-hierarchical cluster analysis was performed to verify the three clusters obtained with hierarchical cluster analysis, as well as to finalize the cluster centers. It was observed that the new clusters obtained with the non-hierarchical cluster analysis method showed a similarity to the three clusters obtained using the hierarchical cluster method and that 75% of the students remained in the same clusters across the two analyses. These findings support that the AMS scores were included in these three clusters. The stability of these three clusters was examined through the double-split cross-validation procedure. The average kappa value across the subsamples (.89) provided substantial evidence for the stability of these three cluster solutions.

ANOVA was performed to determine whether the mean scores of the motivation clusters obtained from the sub-dimensions of the AMS differ significantly from each other. In this analysis, the Welch test was used instead of the F test because the variances are not homogeneous. According to the clusters, the average scores obtained from the sub-scales of AMS and Welch test results regarding whether they differ significantly from each other are given in Table 2.

Table 2. Motivational characteristics of academic motivation profiles

Motivation Types	1. Cluster			2. Cluster			3. Cluster			Welch Test
	Profile with high-level motivation			Profile with medium-level motivation			Profile with low-level motivation			
	<i>M</i>	<i>SD</i>	<i>Z</i>	<i>M</i>	<i>SD</i>	<i>Z</i>	<i>M</i>	<i>SD</i>	<i>Z</i>	
Intrinsic motivation to know	25.05	6.78	0.84	20.65	3.30	0.02	14.48	4.14	-1.14	1098.08*
Intrinsic motivation to accomplish	22.90	3.40	0.96	16.47	3.70	-0.11	10.61	3.98	-1.09	1334.90*
Intrinsic motivation to experience sensations	20.72	4.01	0.91	14.42	4.08	-0.19	10.35	4.00	-0.89	843.36*
Identified regulation	24.89	2.80	0.67	22.23	3.22	0.10	17.27	3.98	-0.96	542.98*
Introjected regulation	21.84	4.71	0.85	15.15	5.09	-0.18	11.16	4.97	-0.77	627.41*
External regulation	23.55	3.91	0.35	22.09	4.23	0.06	19.73	5.33	-0.40	75.23*
Amotivation	5.61	2.96	-0.39	6.87	3.86	-0.14	9.81	5.28	0.43	104.52*

* $p < .05$

As can be seen in Table 2, the average score of the first cluster regarding the intrinsic and extrinsic motivation subscales is higher than the scores of the second and third clusters. The average score of the amotivation scale of the first cluster is lower than that of the 2nd and 3rd clusters. When the average scores of the second cluster and the third cluster are compared with the scores of intrinsic motivation, extrinsic motivation, and amotivation, it is seen that the intrinsic and extrinsic motivation scores of the second cluster are higher than those of the third cluster and the average score of the amotivation scale is lower than that of the third cluster. Welch test results indicated that there were significant differences between the clusters in terms of the average scores of the AMS subscales. The results of Tamhane's T2 test regarding the source of the differences between the average scores showed that all these differences between the average scores were significant. As a whole, these results supported that the three motivation clusters were correctly distinguished.

Interpretation of The Clusters and Determination of Profiles

For interpreting the clusters and creating the profile names, histogram graphs were formed based on the clusters relating to motivation types. These are presented in Figure 1.

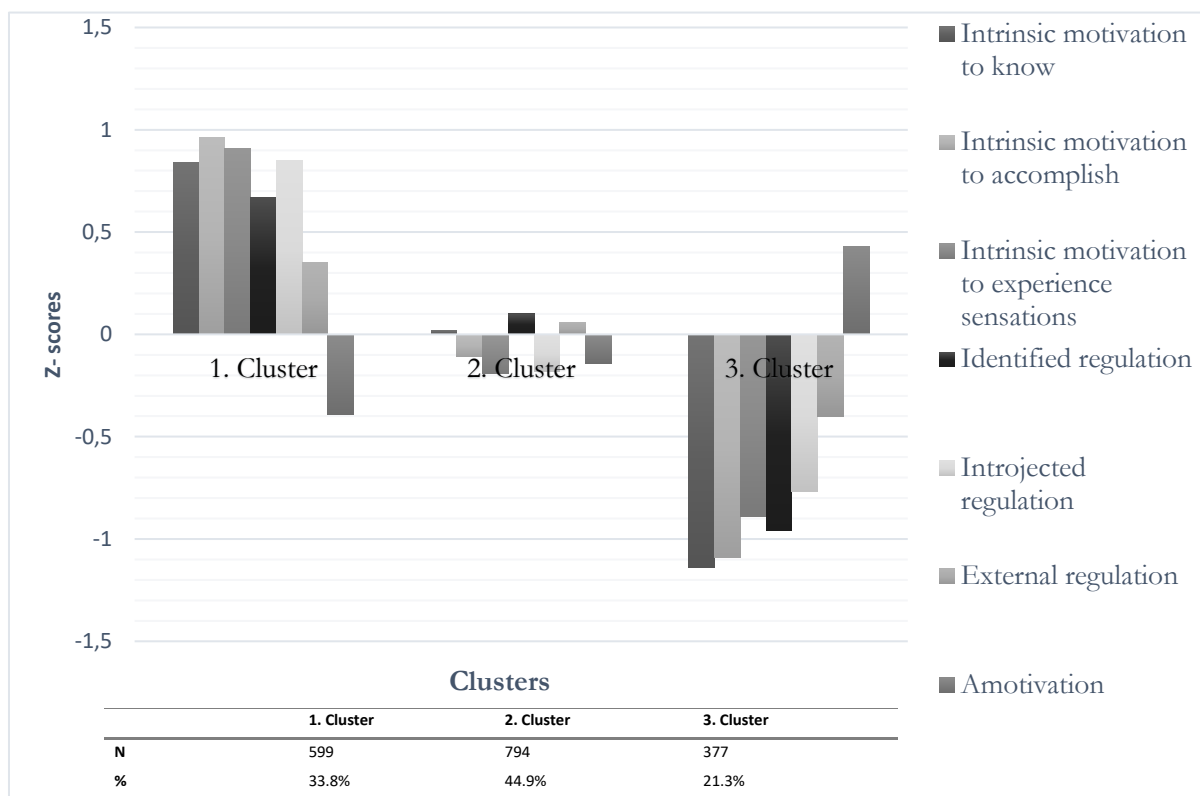


Figure 1: Distribution of cluster-center scores by the clusters' motivation types

As can be seen in Table 2, the average score of the first cluster regarding the intrinsic and extrinsic motivation subscales is higher than the scores of the second and third clusters. The average score of the amotivation scale of the first cluster is lower than that of the 2nd and 3rd clusters. When the average scores of the second cluster and the third cluster are compared with the scores of intrinsic motivation, extrinsic motivation, and amotivation, it is seen that the intrinsic and extrinsic motivation scores of the second cluster are higher than those of the third cluster and the average score of the amotivation scale is lower than that of the third cluster. Welch test results indicated that there were significant differences between the clusters in terms of the average scores of the AMS subscales. The results of Tamhane's T2 test regarding the source of the differences between the average scores showed that all these differences between the average scores were significant. As a whole, these results supported that the three motivation clusters were correctly distinguished.

As shown in Figure 1, the 1st cluster has the lowest amotivation score of all three clusters, highest scores in all other motivation types. For this reason, it was named as high-level academic motivation profile. A total of 33.8% of the students are located in this profile. The 2nd cluster, representing students with a medium-level motivation profile, has a medium level of scores compared to the other two clusters in all motivation types. This cluster is named as medium-level academic motivation profile. A total of 44.9 % of the group is located in this profile. The 3rd cluster has the highest amotivation score and the lowest scores in other types of motivation. This cluster has been named as a low-level academic motivation profile 21% of the group is in this profile.

Findings Regarding Academic Procrastination and Life Satisfaction

As can be seen in Table 2, there are differences in favor of those in higher motivated profiles among the participants' academic procrastination scores. One-way analysis of variance was applied to determine whether the participants' academic procrastination scores significantly changed according to their motivation profiles. Whether life satisfaction scores differ significantly in terms of academic motivation profiles was tested by one-way ANCOVA analysis by controlling students' psychological needs satisfaction levels. Findings from these analyses are presented in Table 3.

Table 3. Distribution of university students's academic procrastination and life satisfaction levels according to academic motivation profiles and the results of one-way variance analysis and covariance analysis

Motivation Profile	Academic Procrastination					Life Satisfaction				
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	η^2	<i>M</i>	<i>SD</i>	<i>Corrected Mean</i>	<i>F</i>	η^2
Profile with high-level motivation	599	34.86	11.00	61.70*	.04	23.60	6.23	22.61	18.12*	.02
Profile with medium-level motivation	794	38.67	11.24			21.48	5.98	21.69		
Profile with low-level motivation	377	40.97	12.26			19.32	6.03	20.45		

* $p < .001$

Variance analysis results showed that there were significant differences between the academic procrastination scores of students in different motivation profiles ($F(2, 1767) = 61.70, p < .001$). However, the effect size value (η^2) of the motivation profiles on academic procrastination was found to be at a low level ($\eta^2 = .04$). The results of a two-group comparison conducted using the Tukey HSD test indicate that the academic procrastination level ($\bar{X} = 34.86$) of students within the high-level motivation profile is significantly lower than students located within the medium-level profile ($\bar{X} = 38.67$) and low-level motivation profile ($\bar{X} = 40.97$). The academic procrastination level of the students in the medium-level motivation profile ($\bar{X} = 38.67$) was found to be significantly lower than those of students in the low-level motivation profile ($\bar{X} = 40.97$).

Due to the strong relationship between life satisfaction and psychological-need satisfaction (Cihangir-Çankaya, 2005; İlhan ve Özbay; 2010; Ryan, Bernstein ve Brown, 2010; Toprak, 2014) psychological need satisfaction was considered as a control variable when examining life satisfaction level according to academic procrastination level of students. As seen in Table 2, after controlling the participants' psychological need satisfaction level, it was observed that life satisfaction scores decreased in the high-level motivation profile but increased in the medium and low-level motivation profiles. One-way analysis of covariance revealed that the life satisfaction average scores of the participants in high, medium and low motivation profiles were significantly different from each other. ($F(2, 1766) = 18.12, p < .001$). However, the effect size of the academic motivation profiles on life satisfaction was found to be of a low level ($\eta^2 = 0.02$). According to the Tukey HSD test results, the life satisfaction levels of students with a high-level motivation profile ($\bar{X} = 23.60$) were found to be significantly higher than those of students with a medium-level motivation profile ($\bar{X} = 21.48$) and low-level motivation profiles ($\bar{X} = 19.32$). Also,

students with a medium-level motivation profile ($\bar{X}= 21.48$) were found to have significantly higher scores than those with a low-level motivation profile ($\bar{X}= 19.32$).

DISCUSSION, CONCLUSION & SUGGESTIONS

In this study, it was determined that the participants were clustered in three different motivation profiles named as high, medium, and low-level motivation profiles according to their scores obtained from AMS. The scores obtained by the students in the medium motivation profile from the intrinsic and extrinsic motivation types are lower than the high motivation profile but higher than the low motivation profile. The amotivation scale score of this group is lower than that of the high motivation profile and higher than that of the low motivation profile. While the students in the low-level motivation profile obtained the lowest scores from the intrinsic and extrinsic motivation types, they obtained the highest scores from the amotivation subscale. The three types of motivation profiles obtained in this research show quite many similarities to the three profiles that Ratella et al. (2007) obtained in two different studies conducted on high school students. However, the other three profiles obtained in a study conducted with university students within the scope of the same research differ from the profiles obtained in this study in terms of features that the profiles have. Profiles such as those with high or low autonomous motivation in this research have also been found in previous researches (Boich and Stephan, 2014; Hayenga and Corpus, 2010; Kusrkar et al., 2013; Ratella et al., 2007; Vansteenkiste et al., 2009). However, the profile that has similar characteristics to the profile with a medium-level of motivation has been encountered in few studies (Boich and Stephan, 2014; Ratella et al., 2007). Therefore, it can be stated that the profile with a high-level of motivation and the profile with low-level of motivation obtained in this study are the profiles that the students commonly have.

No autonomous profile whose intrinsic motivation and identified motivation are high and other motivation types are low is obtained in this study. However, it is seen that an autonomous profile was obtained in all of the studies that previously determined university students' academic motivation profiles (Boich and Stephan, 2014; Kusrkar et al., 2013; Ratella et al., 2007; Vansteenkiste et al., 2009). Additionally, no controlled motivation profile whose intrinsic motivation and identified motivation are low and other extrinsic motivation types are high is obtained in this study. Like autonomous profile, it is seen that a controlled profile was obtained in most of the studies that previously determined university students' academic motivation profiles (Boich and Stephan, 2014; Kusrkar et al., 2013; Ratella et al., 2007; Liu et al., 2009; Vansteenkiste et al., 2009). This situation can be related to cultural factors. One of the most important factors can be the way of choice of profession. The profession and the university that the students choose play a determining role in the university entrance exam in Turkey. Thus, the findings of the study indicate that the students are populously obliged to choose a profession for which they "have enough score" when they choose profession (etin, 2012; zsoy, zsoy, zkara and Memi, 2010). Therefore, most of the students may be attending a university for extrinsic reasons. The fact that the educational environment in universities is not supportive enough of intrinsic motivation might be restraining students from developing profiles related to intrinsic motivation. However, more researches are needed in Turkey to determine the motivation types that the students exhibit and to reveal the factors that are effective in the formation of these motivations.

The findings that show that academic procrastination decreases as the level of intrinsic motivation increase across all three profiles support the previous research findings (Orpen, 1998; Bosota, 2001; Sencal, Julien, and Guay, 2003) that indicate intrinsic academic motivation provides more positive results

for individuals. However, in a study, Vansteenkiste et al. (2009) report that university students with high- and low-motivation profiles show no significant difference regarding their academic procrastination levels. The students who obtained a high level of academic procrastination tended to procrastinate without a reason on performing tasks such as preparing for an exam, doing homework, participating in the lesson. Some of the researchers who tried to explain this situation suggest that academic procrastination should be regarded as a motivational problem (Sencal, Koestner and Vallerand, 1995) and that procrastination arises from scarcity or lack of motivation (Tuckman and Sexton, 1992; Diaz-Morales, Cohen and Ferrari, 2008). Students who obtained a high level of academic procrastination withdraw easily from academic tasks for activities such as watching television, meeting friends, and they confront intention-behavior dilemmas (Schouwenberg, 1995). However, especially students who have high intrinsic motivation persist with maintaining their aims (Ratelle, Guay, Vallerand, Larose and Senecal, 2007; Vallerand and Bissonette, 1992). Moreover, students who have a high level of academic procrastination also have a high level of unwillingness for performing their academic tasks. When the fact that this situation is an important predictor of procrastination is taken into consideration, it can be said that students who have both intrinsic and extrinsic motivations to maintain academic life might be fulfilling their academic tasks without procrastinating them because these students both enjoy learning and pay attention to the consequences of their behaviors in the educational process. Therefore, it can be said that they are more enthusiastic about performing academic tasks and thus they exhibit less procrastination behavior. The fact that students located in the profile that has higher amotivation than the other profiles have a low level of intrinsic or extrinsic reasons to maintain academic life causes them to procrastinate their academic tasks until the very last minute. It can be said that more research findings are needed to support the view that there is a negative relationship between academic procrastination and autonomous motivational orientations of university students.

The findings of this study on satisfaction with life show that students with a more autonomous motivation profile also have higher levels of life satisfaction. This finding, which shows that motivation is an important determinant of life satisfaction, is consistent with the findings of previous studies (Batista et al., 2016; Ko, 2018; Ratella et al., 2007; Salinas-Jimnez et al., 2010). Self-determination theory asserts that individuals who have high well-organized types of intrinsic and extrinsic motivation mostly experience positive feelings and have more satisfaction in their lives. Despite that, it is asserted that individuals who do not have well-organized types of extrinsic motivation and who have high amotivation mostly experience negative feelings and they have less satisfaction in their lives (Ryan and Deci, 2011). The findings obtained from other researches conducted in different cultures support this idea (Ratella et al., 2005; Vanteenkiste et al., 2005). It is found in the current study that the students who have high levels of intrinsic and extrinsic motivation have higher life satisfaction than the students in the other profiles. The students in this profile have high intrinsic motivation and extrinsic motivation as well. In this respect, the findings of the current research show both consistency and inconsistency with the views of self-determination theory. However, some researchers (Ratella et al., 2007) suggest that autonomous motivation can have a role in protection. They state that in profiles that have high autonomous and controlled motivations, autonomous motivation can be protecting against the negative effects of controlled motivation. It can be said that the results obtained in this research are consistent with this view. However, more studies are needed to determine the protective effect of autonomous motivation.

Implications

In this research, students' academic motivation profiles that the students exhibit at a certain period are analyzed. In further researches to be performed, students' motivation profiles can be determined as soon as they start university education, and changes in these profiles can be analyzed with longitudinal studies during their university education. Thus, the role of university education can be determined in academic motivation profiles. The current study aims to describe only the motivation profiles. In the studies to be conducted in the future, different research methods can be used. Thus it can be possible to analyze why university students exhibit some profiles while they do not exhibit some of the others. This study can be repeated in different samples, and academic motivation profiles at different levels of education can be compared.

Conclusion

These results show that intrinsic motivation, extrinsic motivation, and amotivation in an individual work together at the same time, rather than supporting the views of some authors (Hayenga and Corpus 2010; Deci and Ryan, 2012; Ratella et al. 2007) suggest that intrinsic and extrinsic motivation works together in an individual. Additionally, it was revealed by the current study that the students who had intrinsic and extrinsic motivations at a high level and amotivation at a low-level exhibit less academic procrastination behavior and have higher psychological need satisfaction and life satisfaction as well.

Limitations

This study has several strengths and limitations. The most important strength of this study is that this is the first study conducted in Turkey that determines university students' academic motivation profiles and investigates its relationship with their academic procrastination and life satisfaction. The fact that no other study investigating the relationship between different motivation profiles and life-satisfaction directly was not found in the related literature is another strength of this research. However, the selection of the participants in this study only from one university is a limitation of the current research because it undermines the generalizability of the study findings. Another limitation of this study is that those participants who did not respond to the scale items honestly could not be removed from the study, this was due to the lack of filler items in the scales used in this research.

REFERENCES

- Altintas, E., Guerrien, A., Vivicorsi, B., Clment, E., & Vallerand, R.J. (2018). Leisure activities and motivational profiles in adaptation to nursing homes. *Canadian Journal on Aging*, 37 (3), 333–344. DOI: <https://doi.org/10.1017/S0714980818000156>
- Aydođan, D., & zbay Y. (2012). Explanation of academic procrastination from self-esteem, state anxiety, self-efficacy. *Pegem Eđitim ve đretim Dergisi* 2(3): 1-10. DOI: <https://doi.org/10.14527/C2S3M1>
- Bacanlı, H., & Cihangir-ankaya, Z. (2003). Adaptation study of Need Satisfaction Scale. 7th National Psychological Consultant and Counselling Congress. Malatya, İnn University.
- Balkıs, M. (2006). *The relationship between student teachers' procrastination behavior, decision making, and thinking styles*. PhD diss., Dokuz Eyll University, İzmir.
- Batista, M., Castuera, J. R., Honrio, S., Petrica, J. & Serrano, J. (2016). Self-determination and life satisfaction: an exploratory study with veteran judo athletes. *Revista de Artes Marciales Asiáticas* 11(2): 90-91. Doi: 10.18002/rama.v11i2s.4187
- Bhat, R. Z., & Naik, A. R. (201). Relationship of academic intrinsic motivation and psychological well-being among students. *International Journal of Modern Social Sciences* 5(1): 66-74.
- Bishop, E. A. (2010). *Motivation and its impact on the academic achievement of at-risk students*. (Unpublished master thesis). The University of Northern Iowa.
- Boich, J. C., & Stephan, Y. (2014). Motivational profiles and achievement: A prospective study testing potential mediators. *Motivation and Emotion*, 38, 79–92. Doi: 10.1007/s11031-013-9361-6
- Brownlow, S., & Reasinger, R. D. (2000). Putting off until tomorrow what is better done today: Academic procrastination as a function of motivation toward college work. *Journal of Social Behavior and Personality*, 15(5), 15-34.
- Burton, K. D., Lydon, J. E., D'Alessandro, D. U., & Koestner, R. (2006). The differential effects of intrinsic and identified motivation on well-being and performance: Prospective, experimental, and implicit approaches to self-determination theory. *Journal of Personality and Social Psychology*, 91(4), 750-762.
- Can, G. (2012). The validity and reliability of the Turkish version of Academic Motivation Scale (AMS). Paper presented at the International Counselling and Education, İstanbul Ticaret University, May, 33
- Can, G. (2015). Turkish version of the academic motivation scale. *Psychological Reports: Employment Psychology & Marketing*, 116 (2), 388-408. <https://doi.org/10.2466/14.08.PR0.116k24w5>
- Chow, H. P. H. (2005). Life satisfaction among university students in a Canadian prairie city: A multivariate analysis. *Social Indicators Research*, 70, 139-150.
- Cihangir-ankaya, Z. (2005). *Self-determination model: Need satisfaction, well-being*. (Unpublished doctoral thesis). Hacettepe University, Ankara.
- Cokley, K. (2015). A confirmatory factor analysis of the academic motivation scale with black college students. *Measurement and Evaluation in Counseling and Development*, 48(2), 124-139. DOI: 10.1177/0748175614563316
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1991). *A motivational approach to self: Integration in personality*. In Nebraska Symposium on Motivation: Perspectives on motivation edited by Richard Dienstbier, 237-288. Lincoln: University of Nebraska Press.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. https://doi.org/10.1207/S15327965PLI1104_01
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macro theory of human motivation, development, and health. *Canadian Psychology*, 49(3), 182–185. <https://doi.org/10.1037/a0012801>
- Deci, E. L., & Ryan, R. M. (2012). Overview of self-determination theory. In R. M. Ryan (Ed.), *The Oxford Handbook of Human Motivation* (pp.85-107). New York, NY: Oxford University Press.

- Deci, E.L., Vallerand, R. J., Pelletier, L. G. & Ryan, R. M. (1991). Motivation and Education: The Self-determination Perspective. *Educational Psychologist*, 26 (3-4), 325-346. <https://doi.org/10.1080/00461520.1991.9653137>.
- Diener, E., R. A. Emmons, R. J. Larsen, and S. Griffin. (1985). The satisfaction with life scale. *Journal of Personality Assessment* 49(1):71-75.
- Diener, E., & Lucas, R. E. (1999). Personality and subjective well-being. In D. Kahneman, E. Diener & N. Schwarz (Eds.), *Well-Being: The Foundations of Hedonic Psychology* (pp.213-229). New York, NY, US: Russell Sage Foundation.
- Elliot, A., Sheldon, K., & Church, M. (1997). Avoidance personal goals and subjective well-being. *Personality and Social Psychology*, 23 (9), 915-927.
- Gillet, N., Lafrenire, M. A. K., Vallerand, R. J., Huart, I. & Fouquereau, E. (2014). The effects of autonomous and controlled regulation of performance-approach goals on well-being: A process model. *British Journal of Social Psychology*, 53, 154-174. <https://doi.org/10.1111/bjso.12018>.
- Graves, L. M., Cullen, K. L., Lester, H. F., Ruderman, M. N. & Gentry, W. A. (2015). Managerial motivational profiles: Composition, antecedents, and consequences. *Journal of Vocational Behaviour*, 87, 32-42. <https://doi.org/10.1016/j.jvb.2014.12.002>
- Guo, Y. (2018). The influence of academic autonomous motivation on learning engagement and life satisfaction in adolescents: The mediating role of basic psychological needs satisfaction. *Journal of Education and Learning*, 7(4), 254-261.
- Hair, J. F., Black, W. C., Babi. B. J., & Anderson, R. E. (2016). *Multivariate Data Analysis*. 7th ed. United Kingdom: Pearson Education Limited.
- Hayenga A.O., & Corpus, J.H. (2010). Profiles of intrinsic and extrinsic motivations: A person-centered approach to motivation and achievement in middle school. *Motivation and Emotion*,34, 371-383. Doi:10.1007/s11031-010-9181-x
- lhan, T.,& zbay, Y. (2010). The predictive role of life goals and psychological need satisfaction on subjective well-being. *Turkish Psychological Counselling and Guidance Journal*, 10 (56), 109 -118.
- Jimnez, S., Mara del Mar, D. M., Joaqun, A., & Jimenez, J. S. (2010). Income, motivation, and satisfaction with life: An empirical analysis. *Journal of Happiness Studies*, 11, 779-793. Doi: 10.1007/s10902-010-9185-y
- Kaan, M. (2009). Determining the variables which explain the behavior of academic procrastination in university students. Ankara University, *Journal of Faculty of Educational Science*, 42(2), 113-128.
- Katz, I., Eilot, K., & Nevo, N. (2014). 'I'll do it later": type of motivation, self-efficacy, and homework procrastination. *Motivation and Emotion*, 38, 111-119.
- Krapp, A., Hidi, S. & Renninger, K. A. (1992). Interest, learning, and development. In K. A. Renninger, S. Hidi, & A. Krapp (Eds.), *The role of interest in learning and development* (pp. 3-25). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.
- Ko, K. (2018). Investigation of the relationship between life satisfaction levels and academic motivation levels of the students of the faculty of sports sciences. *The Journal of Turkish Sport Sciences*, 1(2), 58-65.
- Kusurkar, R. A., Croiset, G., Galindo-Garr, F., & Cate, O. T. (2013) Motivational profiles of medical students: association with study effort, academic performance, and exhaustion. *BMC Medical Education*, 13, 87.
- lKwok, Y. Y., Chui, W. H., & Wong, L. P. (2013). Need satisfaction mechanism linking volunteer motivation and life satisfaction: A mediation study of volunteers subjective well-being. *Social Indicators Research*, 114, 1315-1329. Doi: 10.1007/s11205-012-0204-8
- Liu, W. C., Wang, C. K. J. , Tan, O. S., Koh, C., & Ee, J. (2009). A self-determination approach: Understanding students' motivation in project work. *Learning and Individual Differences*, 19(1), 139-145. [HTTPS://DOI.ORG/10.1016/J.LINDIF.2008.07.002](https://doi.org/10.1016/j.lindif.2008.07.002)
- Mafini, C., & Dlodlo, N. (2014). The relationship between extrinsic motivation, job satisfaction, and life satisfaction amongst employees in a public organization. *SA Journal of Industrial Psychology*, 40(1), 1-12.

- Martn-Albo, J., Nnez, J. L., Domnguez, E., Len, J. & Toms, J. M. (2012). Relationships between intrinsic motivation, physical self-concept and satisfaction with life: a longitudinal study. *Journal of Sports Sciences*, 30(4), 337-347. <https://doi.org/10.1080/02640414.2011.649776>
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. (1953). *The achievement motive*. New York: Appleton-Century-Crofts.
- Myers, D., & Deiner, E. (1995). Who is happy. *Psychological Science*, 6, 1-19.
- McCown, W., Petzel, T., & Rupert, P. (1987). An experimental study of some hypothesized behaviors and personality variables of college student procrastinators. *Personality and Individual Differences*, 8(6), 781-786.
- Niemiec, C.P., Lynchb, M.F., Vansteenkiste, M., Bernstina, J., Deci, E.L., & Ryan, M. R. (2006). The antecedents and consequences of autonomous self-regulation for college: A self-determination theory perspective on socialization. *Journal of Adolescence*, 29(5), 761-775. <https://doi.org/10.1016/j.adolescence.2005.11.009>
- Onwuegbuzie, J, A. (2004). Academic Procrastination and Statistics Anxiety. *Assessment & Evaluation in Higher Education*, 29(1), 3-19. <https://doi.org/10.1080/0260293042000160384>
- Orpen, C. (1998). The Causes and Consequences of Academic Procrastination: A Research Note. *Westminster Studies in Education*, 21(1), 73-75. <https://doi.org/10.1080/0140672980210107>
- zer, A. E., & Altun, E. (2011). The reasons for academic procrastination among university student. *Mehmet Akif Ersoy niversitesi Eēitim Fakltesi Dergisi*, 11(21), 45-72.
- Peterson, C., N. Park & Seligman, M. E. P. (2005). Orientations to happiness and life satisfaction: the full life versus the empty life. *Journal of Happiness Studies*, 6(1), 25-41. Doi:10.1007/s10902-004-1278-z
- Powers, C.L. (2008). Academic achievement and social involvement as predictors of life satisfaction among college students. *Psi Chi Journal of Undergraduate Research*, 13(3), 128-135.
- Ratelle, C. F., Guay, F., Vallerand, R.J., Larose, S., & Senecal, C. (2007). Autonomous, controlled, and amotivated types of academic motivation: A person-oriented analysis. *Journal of Educational Psychology*, 99(4), 734-746. Doi: 10.1037/0022-0663.99.4.734
- Ryan, R. M., Bernstein, J. H., & Brown, K. W. (2010). Weekends, work, and well-being: Psychological need satisfactions and day of the week effects on mood, vitality, and physical symptoms. *Journal of Social and Clinical Psychology*, 29, 95-122.
- Ryan, R. M. & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67. <https://doi.org/10.1006/ceps.1999.1020>
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Ryan, R. M., & Deci, E. L. (2009). Promoting Self-Determined School Engagement. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook of Motivation at School*, (pp. 171-195). New York, NY: Routledge.
- Salinas-Jimnez, M.d.M., Arts, J. & Salinas-Jimnez, J. (2010). Income, motivation, and satisfaction with life: An empirical analysis. *Journal of Happiness Studies*, 11, 779-793. Doi:10.1007/s10902-010-9185-y.
- Schunk, D. H., Meece, J. L. & Pintrich, P. R. (2013). *Motivation in Education*. USA: Pearson.
- Sencal, C., Julien, E. & Guay, F. (2003). Role conflict and academic procrastination: A self-determination perspective. *European Journal of Social Psychology*, 33(1), 135-145. <https://doi.org/10.1002/ejsp.144>.
- Solomon, J. L., & Rothblum, D. E. (1984). Academic procrastination: Frequency and cognitive-behavioral correlates. *Journal of Counseling Psychology*, 31(4), 503-509. <https://doi.org/10.1037/0022-0167.31.4.503>.
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133, 65-94.
- Toprak, H. (2014). Psychological resilience and satisfaction of psychological needs as predictors of subjective well-being and life satisfaction in the adolescents. (Unpublished Master's Thesis). Sakarya University, Turkey.
- Tuckman, W. B. (1991). The development and concurrent validity of the procrastination scale. *Educational and Psychological Measurement*, 51(2), 473-480. <https://doi.org/10.1177/0013164491512022>.

- Tuckman, B.W., & Sexton, T. (1989, April). Effects of relative feedback in overcoming procrastination on academic tasks. Paper is given at the meeting of the American Psychological Association, New Orleans, LA.
- Uzun-zer, B., Sakes, M. & Tuckman, B. C. (2013). Psychometric properties of the Tuckman procrastination scale in a Turkish sample. *Psychological Reports*, 113(3), 874-884. <https://doi.org/10.2466/03.20.PR0.113x28z7>.
- Vallerand, R. J. (1989). Toward a transcultural validation methodology of psychological questions: Implications for research in French. *Canadian Psychology*, 30(4), 662-689.
- Vallerand, R. J. (2002). Intrinsic and extrinsic motivation: a hierarchical model. In E. L. Deci & R. M. Ryan (Eds.) *Handbook of Self-Determination Research*, 37-63. Rochester, New York: University of Rochester Press.
- Vallerand, R. J., Blais, M. R., Brire, N. M., & Pelletier, L. G. (1989). Construction and validation of the academic motivation scale. *Canadian Journal of Behavioural Science*, 21(3), 323 - 349. <https://doi.org/10.1037/h0079855>.
- Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, 72(5), 1161-1176. <https://doi.org/10.1037/0022-3514.72.5.1161>
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Brire, N. M., Sencal, C., & Vallires, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic and amotivation in education. *Educational and Psychological Measurement*, 52(4), 1003-1019. <https://doi.org/10.1177/0013164492052004025>
- Vansteenkiste, M., Zhou, M., Lens, W. & Soenens, B. (2005). Experiences of autonomy and control among Chinese learners: Vitalizing or immobilizing? *Journal of Educational Psychology*, 97(3), 468-483. <https://psycnet.apa.org/doi/10.1037/0022-0663.97.3.468>
- Vansteenkiste, M., Sierens, E., Soenens, B., Luyckx, K. & Lens, W. (2009). Motivational profiles from a self-determination theory perspective: The quality of motivation matters. *Journal of Educational Psychology*, 101(3), 671-688. <https://doi.org/10.1037/a0015083>
- Van den Broeck, A., Lens, W., Witte, H., & Van Coillie, H. (2013). Unraveling the importance of the quantity and the quality of workers' motivation for well-being: A person-centered perspective. *Journal of Vocational Behavior*, 82(1), 67-78. <https://doi.org/10.1016/j.jvb.2012.11.005>
- Vaters, C. A. (2015). Motivation and well-being: a test of self-determination theory using a person-centered approach. (Unpublished master thesis). The University of Western Ontario.
- Wormington, S., Corpus, J. H., & Anderson, K. G. (2012). A person-centered investigation of academic motivation and its correlates in high school. *Learning and Individual Differences*, 22(4), 429-438. <https://doi.org/10.1016/j.lindif.2012.03.004>.
- Yetim, . (1993). Life satisfaction: A study based on the organization of personal project. *Social Indicators Research*, 29 (3), 277-289. <https://doi.org/10.1007/BF01079516>

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MDG: Idea and design, data collection and analysis, interpretation of findings, reporting of the article.

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AAC: Idea and design, data analysis, interpretation of findings, reporting of the article

Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

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Ethical Statement

The authors declare that they have carried out the research within the framework of the Helsinki Declaration and with the participation of volunteer students. In line with this, the study was permitted by Anadolu University, Ethics Committee.

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RESEARCH

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ARAŞTIRMA

Açık Erişim

The Impact of Mindfulness and Assertiveness on Well-being: A Structural Equation Modeling Analysis

Bilinçli Farkındalık ve Atılganlığın İyi Oluş Üzerine Etkisi: Bir Yapısal Eşitlik Modellemesi Analizi

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ABSTRACT

Mindfulness is a positive psychological concept that has a crucial impact on individuals' wellbeing and mental health. The literature cites a considerable number of studies exploring the impact of mindfulness on various forms of wellbeing and documenting the relationship between mindfulness and other constructs. In order to obtain a complete understanding of the concept, an examination of potential mediators in the relationship between mindfulness and well-being is needed. In this regard, the current study aims to explore the influence of mindfulness on resilience, subjective wellbeing, and psychological well-being through assertiveness. In a sample of 400 university students, participants completed the Mindful Attention and Awareness Scale (MAAS), Rathus Assertiveness Schedule (RAS), Brief Resilience Scale (BRS), Positive and Negative Affect Schedule (PANAS), Satisfaction with Life Scale (SWLS) and Psychological Well-being Scale (SPWB) and results demonstrated that assertiveness, mindfulness, positive affect, life satisfaction, and the dimensions of psychological well-being scores were found to be positively correlated with assertiveness and reversely associated with negative affect, as expected. Structural equation modeling analyses demonstrated that assertiveness mediated the relationship between mindfulness and resilience, subjective well-being, and psychological well-being. In conclusion, the results show that mindfulness contributes to some of the well-being indices, such as resilience, subjective well-being, and psychological well-being through assertiveness. Implications are discussed further.

Article Information**Keywords**

Mindfulness
Assertiveness
Resilience
Subjective Well-being
Psychological Well-being

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ÖZET

Bilinçli farkındalık, bireylerin ruh sağlığı ve iyi oluşları üzerinde çok önemli bir etkiye sahip olan bir pozitif psikoloji kavramıdır. Literatür, bilinçli farkındalığın çeşitli iyi oluş biçimleri üzerindeki etkisini araştıran ve bilinçli farkındalık ile diğer kavramlar arasındaki ilişkiyi belgeleyen önemli sayıda çalışmaya atıfta bulunmaktadır. Kavramın tam olarak anlaşılması için, bilinçli farkındalık ve iyi oluş arasındaki ilişkide potansiyel araçların incelenmesi gerekir. Bu bağlamda, mevcut çalışma, bilinçli farkındalığın psikolojik sağlık, öznel iyi oluş ve psikolojik iyi oluş üzerindeki etkisini atılganlık yoluyla keşfetmeyi amaçlamaktadır. 400 üniversite öğrencisinden oluşan bir örnekleme, katılımcılar Bilinçli Farkındalık Ölçeği (MAAS), Rathus Atılganlık Ölçeği (RAS), Psikolojik Sağlık Ölçeği (BRS), PANAS, Psikolojik İyi Oluş Ölçeği (SPWB) ve Yaşam Doyumu Ölçeği'ni (SWLS) tamamlamıştır. Bulgular, atılganlık, bilinçli farkındalık, olumlu duygulanım, yaşam doyumu ve psikolojik iyi oluş puanlarının boyutlarının girişkenlik ile pozitif yönde ilişkili ve beklendiği gibi olumsuz duygulanım ile ters ilişkili olduğunu göstermiştir. Yapısal eşitlik modelleme analizleri, atılganlığın, bilinçli farkındalık ve psikolojik sağlık, öznel iyi oluş, psikolojik iyi oluş arasındaki ilişkiye aracılık ettiğini göstermiştir. Sonuçlar, bilinçli farkındalığın, psikolojik sağlık, öznel iyi oluş ve psikolojik iyi oluş gibi bazı iyi oluş endekslerine girişkenlik yoluyla katkıda bulunduğunu göstermektedir. Bulgular tartışılmıştır.

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INTRODUCTION

With the “burgeoning” of the positive psychology movement, examination of the influence of positive psychological constructs on wellbeing has captured considerable research attention (Seligman, 2002). Mindfulness is evidently one of these significant positive psychological constructs associated with significant positive life outcomes. Mindfulness refers to state encompassing awareness of present moments (Brown, Ryan & Creswell, 2007), acceptance of thoughts and emotions (Baer et al., 2006), being present in the moment (Brown & Ryan, 2003), and the ability to be present at the moment through attention and awareness (Bishop et al., 2004).

Theoretical and empirical studies highlight the strong association between mindfulness and various forms of wellbeing. For instance, mindfulness theories suggest that mindfulness reduces the attachment to internal and external phenomena, thereby facilitating emotion regulation (Kumar, Feldman, & Hayes, 2008). Empirical studies also document the impact of mindfulness on different indices of mental health, including general well-being (Jin, Zhang, Wang, & An, 2020; Şahin, 2019), coping (Uygur, 2019), psychological wellbeing (Deniz, Erus, & Büyükcebeci, 2017; Stevenson, Millings & Emerson, 2019; Voci, Veneziani & Fuochi, 2019), spiritual wellbeing (e.g., Ramadas & Simões, 2019), occupational health (e.g., Braun et al., 2019), resilience (Sünbül & Güneri, 2019) and subjective wellbeing (e.g., Ge, Wu, Li & Zheng, 2019; Hanley, Warner & Garland, 2015; Schutte & Malouff, 2011).

Connections Between Mindfulness and Well-being

Mindfulness and well-being research is well-documented. Studies demonstrated that mindfulness is associated with two prominent models of well-being, namely subjective and psychological well-being. Subjective well-being is rooted in “hedonic” tradition and primes on the current state of happiness, pleasure attainment, and avoidance of pain (Ryff, 2014). Thus, well-being is assessed based on elated current positive feelings and lessened negative feelings in addition to cognitive evaluation of satisfaction with life. In this regard, hedonic well-being encompasses constructs such as positive affect, negative affect, and life satisfaction (Ryan & Deci, 2001). Several studies reported that greater levels of mindfulness are linked with increased levels of positive affect and decreased levels of negative affect (Schutte, & Malouff, 2011), and greater levels of life satisfaction (Hanley, Warner, & Garland, 2015). Thus, awareness of the present moments, non-judgemental attitude toward thoughts and emotions appears to contribute to experience positive feelings more frequently, lessened negative feelings, and greater satisfaction with life.

Likewise, one line of research focuses on the association between mindfulness and psychological well-being. Contrary to subjective well-being, psychological well-being or “eudaimonic” tradition considers well-being as possessing purposes and goals in life, finding meaning, and reaching one’s true capacity (Ryff, 2014). Thus, psychological well-being is viewed as composed of six components: autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life (Ryff, 1989; Ryff & Keyes, 1995). Empirical studies document that greater levels of mindfulness are related to increased psychological well-being and studies reported small to medium associations between mindfulness and dimensions of psychological well-being (Whitehead, Bates, Elphinstone, Yang, & Murray, 2019).

Resilience

Resilience refers to positive growth and adaptation in the face of serious life challenges and adversity (Walsh, 2016). The concept captured immense research attention as a considerable number of studies documented the association between resilience and negative psychological symptoms such as psychological distress (Bacchi, & Licinio, 2017), burnout (Bernabé, & Botia, 2016), and positive psychological concepts including hope (Satici, 2016), emotion expression and subjective well-being (Eldeleklioglu & Yildiz, 2020), emotional intelligence (Ramos-Díaz, Rodríguez-Fernández, Axpe, & Ferrara, 2019) and adjustment (Fogarty, Wood, Giallo, Kaufma, & Hansen, 2019). One line of this research focuses on the relationship between resilience and mindfulness as both constructs conceptually overlap one to another. On a conceptual level, mindfulness is characterized as the awareness of the present moment, thoughts, and emotions in a non-judgmental and accepting way (Brown, Creswell, & Ryan, 2015). Likewise, resilience is identified as the acceptance of the hardships and growth out of the hindrances and handicaps. Thus, both of the constructs appear conceptually interrelated. Empirically, a number of studies indicated the strong associations between mindfulness and resilience (e.g., Freligh, & Debb, 2019; Senders et al. 2014; Thompson et al. 2011; Wang, & Kong, 2019). Furthermore, intervention studies demonstrated that mindfulness-based interventions increased the levels of resilience of the participants in a sample of children and youths indicating the possible causal relationship between the concepts (Zenner et al., 2014).

Assertiveness as a Mediator Variable

As the literature documents, mindfulness and well-being are strongly linked. Several studies investigated the mechanisms involved in the relationship between mindfulness and well-being and pointed out that mindfulness can contribute to one's level of well-being directly (e.g., Wilson, Weiss, & Shook, 2020) or through mediators (e.g., Stevenson, Millings, & Emerson, 2019). In order to provide a better understanding of mindfulness, possible other mediator variables are needed to be examined. In this regard, assertiveness is one potential construct as a mediator in the relationship between mindfulness and wellbeing. Assertiveness is defined as individuals' expression of feelings, thoughts, personal rights without disregarding the rights and feelings of others (Speed, Goldstein, & Goldfried, 2018), and one's ability to express one's interests without anxiety (de Acedo Lizarraga et al., 2003). Several studies reveal that acting assertively is linked to the wellbeing of individuals (e.g., Sarkovaet al., 2013). Furthermore, one study significantly demonstrates the effectiveness of assertiveness training on subjective wellbeing and academic achievement (Paezy, Shahraray & Abdi, 2010). Findings of this study revealed that the assertiveness training program effectively increased participants' levels of subjective wellbeing between pre-and post-test and increased academic achievement levels at the follow-up stage.

Although assertiveness and well-being association was investigated, literature documenting the relationship between assertiveness and mindfulness is scarce. In this regard, two conference papers investigated such a relationship and the first study reported that assertiveness mediated the relationship between unidimensional mindfulness and resilience and life satisfaction (Belen, 2019). In the study, mindfulness is examined via one of the prominent unidimensional mindfulness scale (MAAS; Brown, & Ryan, 2003). The second study reported that assertiveness mediated the relationship between components of mindfulness and positive and negative affect (Belen & Yıldırım, 2019) employing a multidimensional mindfulness measure (CAMS-R; Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007). Although the findings of these studies are pivotal, no studies have provided information on

whether assertiveness is involved in the relationship between mindfulness and eudaimonic well-being, leading to an incomplete understanding of the concepts. As noted, eudaimonic well-being (PWB; Ryff, 1995) conveys the longer-term aspect of well-being including possessing purposes, aims in life, finding meaning, and reaching one's true potential. As no studies per se examined such a relationship, the influence of mindfulness and assertiveness on longer-term well-being indices is needed to be investigated. Thus, the purpose of this study is to extend the study by Belen (2019) and examine whether assertiveness mediates the relationship between unidimensional mindfulness, resilience, subjective wellbeing, and psychological well-being within the same model. It was hypothesized that

H₁) Assertiveness, mindfulness, resilience, subjective well-being, and psychological well-being significantly and positively correlated

H₂) Assertiveness accounts for a significant amount of variance in the relationship between mindfulness, resilience, subjective well-being, and psychological well-being.

METHOD

Research Model

Current study was designed as a correlational research. Its first aim includes testing the mediator role of assertiveness in the relationship between mindfulness and resilience, subjective well-being and psychological well-being.

Study Group

400 participants ($M=20.327 \pm 1.71$) were recruited from Bursa Uludag University Educational Science Department Psychological Counseling and Guidance students. The study was administered with voluntary participation and informed consent standard. Test administration was carried out via online software for the exchange of course credit. Participants were ensured about anonymity and confidentiality of the information.

Ethical Statement

Current study procedure was approved by Bursa Uludag University Ethics Board (15/06/2020-92662996-044/E.17586).

Data Collection Tools

Mindful Attention and Awareness Scale. MAAS is a unidimensional scale that is comprised of 15 items and rated based on a 6-point Likert scale from 1 (almost always) to 6 (almost never)(MAAS; Brown & Ryan, 2003). The total score of the scale is obtained by calculating the mean score of the participants' responses of 15 items. Higher scores on the scale convey the higher levels of dispositional mindfulness. Psychometric properties of the scale revealed good internal consistency in a student sample with a coefficient α of .82, in a sample of adults with α of .87, and test-retest reliability ($r=.81$). Validity and reliability studies of Turkish adaptation of the scale yielded good psychometric qualities (Catak, 2011) and the current study reports good alpha reliability of .86.

Rathus Assertiveness Schedule. RAS is a 30-item scale to assess typical assertive (14 items) and non-assertive (16 items) behavior based on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree)(Rathus, 1973). Higher scores on the scale indicate higher levels of assertiveness. Voltan

(1980) validated the Turkish form of the scale and reported Cronbach's alpha of .70 and test-retest validity quotient of .92. The present study reports a coefficient alpha of .85.

Brief Resilience Scale: The Brief Resilience Scale is a 6-item scale based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) (BRS; Smith et al., 2008). The scale score is obtained the mean score of all scale items with reverse coding the negatively worded items. Higher scores yield a higher ability to bounce back from adversity and setbacks. Reliability and validity studies of the Turkish form of the scale were conducted by Doğan (2015) and revealed satisfactory evidence for psychometric properties and the present study reports a coefficient alpha of .89.

Positive and Negative Affect Schedule. PANAS is a 20-item self-report schedule to assess how individuals have been feeling for the last two weeks based on a 5-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely) (Watson, Clark & Tellegen, 1988). The schedule is comprised of 10 adjectives reflecting positive affect (e.g. inspired) and 10 items for negative affect (e.g. distressed). Watson et al. reported (1988) internal reliability coefficients ranging from .85 to .90 and the current study reports a coefficient alpha of .85 for positive affect and .82 for negative affect. Turkish adaptation of the scale was validated by Gencöz (2000) and yielded Cronbach's alphas of .83 and .86, and test-retest reliability of .40, .54 for positive and negative affect, respectively.

Satisfaction with Life Scale. SWLS is a 5-item self-report scale rated based on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) (Diener, Emmons, Larsen, & Griffin, 1985). The scale score is obtained via the sum of the item scores and higher scores indicate higher levels of life satisfaction. Reliability and validity studies of the Turkish adaptation of the scale were conducted by Durak, Senol-Durak & Gencoz (2010) and revealed satisfactory evidence for the psychometric properties of the scale and the present study reports Cronbach's alpha of .85 for internal consistency reliability.

Psychological Well-being. SPWB is an 18-item scale designed to assess dimensions of psychological well-being, namely autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life (Ryff & Keyes, 1995). The items are rated based on a 5-point Likert scale and higher scores on each respective domain convey higher levels of psychological well-being. In terms of the psychometric properties, Turkish adaptation of the scale yielded good psychometric qualities, Cronbach's alpha ranging from .87 to .96 for the dimensions (Imamoğlu, 2004).

Data Analysis

Prior to the main analyses, data were screened in terms of normality, multicollinearity, and outliers. Skewness and kurtosis statistics were used to examine the assumptions of normality. As Table 1 demonstrates, skewness and kurtosis values fall between -/+1 indicating no violation of the normal hypothesis (Hair et al., 2017). The collinearity analyses between constructs showed that the variance inflation factor values for all constructs were less than 5 indicating no multicollinearity between the constructs (ranged from 1,316 to 1,559). The presence of outliers was tested by calculating Mahalanobis distance ($p < .001$) and two cases were removed from the analyses based on the calculation (Tabachnick, & Fidell, 2001). Bivariate correlations were computed between the study variables.

As the review of the pertinent studies has shown, a two-step procedure using structural equation modeling (SEM) has been employed for mediation analyses (Anderson & Gerbing, 1988). In the current study in SEM models, assertiveness and mindfulness were represented by three parcels in order to improve the psychometric properties of the variables and diminish inflated measurement error. For both

assertiveness and mindfulness, items were assigned to the parcels based on the factorial algorithm technique (Matsunaga, 2008). This technique is utilized for parceling the items of unidimensional scales and parcels are created with respect to the magnitude of factor loadings based on factor analysis. Furthermore, subjective well-being was represented in the model with three observed variables, namely positive affect, negative affect, and life satisfaction. Finally, psychological well-being was represented by its dimensions of autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life.

Firstly, the measurement model was tested by performing a confirmatory factor analysis in order to estimate the extent to which each latent variable is represented by its indicators. Secondly, the hypothesized causal model was examined by conducting structural equation modeling (SEM) using the maximum likelihood estimation method, and 95 % bias-corrected bootstrap was employed to examine the significance of the mediating effect. As required in SEM analyses, the goodness of fit indexes was analyzed in order to evaluate the final model (Kline, 2011). Overall model fit was evaluated according to the thresholds recommended by Hu & Bentler (1999). In terms of the threshold, insignificant and lower values for Chi-Square are preferable though this value is mostly affected by sample size (Tabachnick, & Fidell, 2001). Comparative Fit Index (CFI), Incremental Fit Index (IFI), and Tucker-Lewis Index (TLI) scores equal or greater than .95 conveys a good model-data fit while scores between .90 and .95 indicate an adequate fit. A model is considered to be a good fit for the data when $CMIN/DF < 3$ and $RMSEA \leq 0.06$ (MacCallum et al, 1996). All analyses were conducted by using SPSS AMOS 23 (Arbuckle, 2014).

RESULTS

Descriptive statistics including minimum, maximum, mean, standard deviation, skewness, kurtosis values for the study variables are presented in Table 1.

Table 1. Descriptive statistics for the study variables

	α	Min	Max	M	SD	Skewness	Kurtosis
Mindfulness	.85	1.20	5.87	3.98	.82	-.42	-.20
Assertiveness	.86	51.00	152.00	109.59	17.95	-.15	-.08
Resilience	.90	1.00	5.00	3.07	.95	-.17	-.54
Subjective Well-being	.69	12.00	49.00	33.82	7.81	-.41	-.29
Psychological Well-being	.76	10.00	45.00	23.89	7.50	.44	-.40
Mindfulness Parcel 1	.74	5.00	30.00	21.89	4.76	-.51	-.17
Mindfulness Parcel 2	.71	7.00	35.00	23.47	5.63	-.36	-.32
Mindfulness Parcel 3	.70	5.00	30.00	18.79	4.87	-.55	.03
Assertiveness Parcel 1	.75	14.00	58.00	39.97	7.84	-.18	-.22
Assertiveness Parcel 2	.70	16.00	67.00	45.87	8.50	-.16	.07
Assertiveness Parcel 3	.75	13.00	53.00	36.09	7.73	-.13	-.16

In terms of testing intercorrelations between study variables, bivariate correlation analyses were conducted. As Table 2 demonstrates, assertiveness correlated positively with mindfulness, resilience, positive affect, life satisfaction, and dimensions of psychological well-being; whilst correlated negatively with negative affect, as expected.

Table 2. Intercorrelations among study variables

	1	2	3	4	5	6	7	8	9	10	11	12
1.A	1											
2.M	.30**	1										
3.R	.40**	.26**	1									
4.PA	.35**	.21**	.33**	1								
5.NA	-.43**	-.50**	-.46**	-.33**	1							
6.LS	.23**	.26**	.33**	.55**	-.40**	1						
7.AUT	.43**	.18**	.32**	.25**	-.30**	.22**	1					
8.EM	.48**	.44**	.44**	.53**	-.52**	.62**	.33**	1				
9.PG	.33**	.31**	.24**	.30**	-.30**	.28**	.16**	.34**	1			
10.PR	.37**	.32**	.29**	.27**	-.35**	.32**	.25**	.37**	.29**	1		
11.SA	.41**	.40**	.41**	.45**	-.49**	.62**	.29**	.59**	.40**	.36**	1	
12.PI	-.02	.20**	-.05	.07	-.09	.08	.01	.06	.19**	.14**	.09	1

Note. A= Assertiveness, M= Mindfulness, R=Resilience, PA=Positive Affect, NA=Negative Affect, LS=Life Satisfaction, AUT=Autonomy, EM=Environmental Mastery, PG=Personal Growth, PR=Positive Relations, SA= Self-Acceptance, PI= Purpose in Life, $p^* < .05$. $p^{**} < .01$. $p^{***} < .001$

Measurement Model

The measurement model was tested by conducting confirmatory factor analyses (CFA) in order to explore whether the model adequately fits the data. In the measurement model, assertiveness, mindfulness, resilience, subjective well-being, and psychological well-being were determined as correlated latent variables. Table 3 demonstrates the statistics of fit indices for the measurement model of the current study.

Table 3. Measurement model fit summary

Name of Category	Name of Index	Measurement Level	Comments
	Chi-Square (CMIN)	$p\text{-value} = 0.000 < 0.05$	Required level is not achieved
Absolute Fit Indices	RMSEA	$RMSEA = 0.06 \leq 0.06$	Required level is achieved
Incremental Fit Indices	CFI	$CFI = 0.925 > 0.90$	Required level is achieved
	TLI	$TLI = 0.908 > 0.90$	Required level is achieved
	IFI	$IFI = 0.926 > 0.90$	Required level is achieved
Parsimonious Fit Indices	Chi-Square/DF(CMIN/DF)	$CMIN/DF = 2.66 < 3$	Required level is achieved

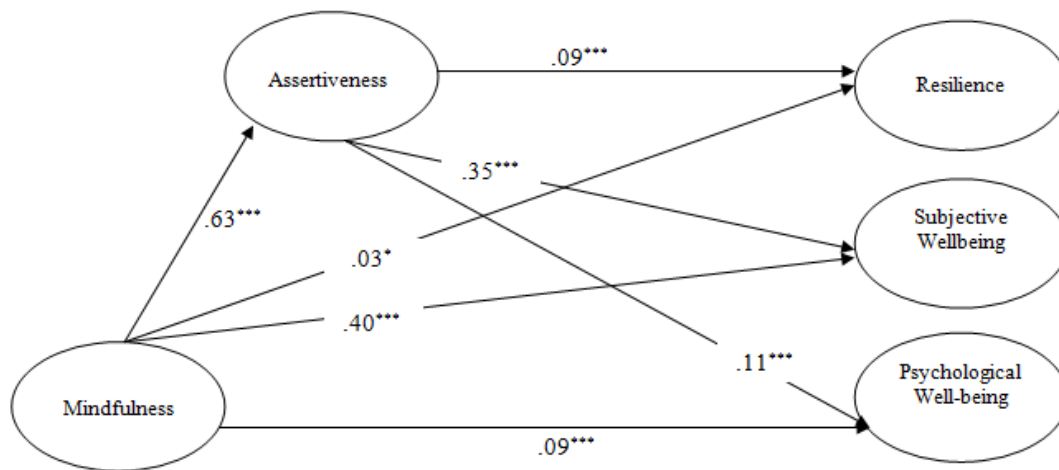
Table 4. Fit Statistics for Model 1 and Model 2

Model	χ^2	DF	p	CMIN/DF	RMSEA	CFI	TLI	IFI
M1 (Full mediation)	528.41	177	$p < .001$	2.98	0.07	0.90	0.89	0.90
M2 (Partial M)	479.35	174	$p < .001$	2.75	0.06	0.92	0.90	0.92

Structural Model

Structural equation modeling analyses were performed in order to test the mediator role of assertiveness. In this regard, two possible structural models have been examined in order to compare the alternative models and determine the most appropriate model in terms of the structural relations. First, a full mediation role of assertiveness, without the direct relationship between mindfulness and resilience, subjective well-being, and psychological well-being was tested as Model 1 (M1) and results revealed good

model-data fit with all paths being significant between latent and observed variables: χ^2 (177, N = 400) = 528.41, $\chi^2 / df = 2.98$, $p < .001$; CFI = .90; TLI = .89; IFI=.90; RMSEA = .07 (90% CI = .064–.078). Second, partial mediating effect of assertiveness between mindfulness and resilience, subjective well-being, and psychological well-being was examined with the aim of comparison alternative models (M2) and results demonstrated very satisfactory fit to the data: χ^2 (174, N = 400) = 479.35, $\chi^2 / df = 2.75$, $p < .001$; CFI = .92; TLI = .90; IFI=.92; RMSEA = .06 (90% CI = .059–.073). As Table 4 demonstrates, fit indices indicates a slight improvement for partial mediation model to full mediation model and paths between mindfulness and resilience, subjective well-being, and psychological well-being remain significant for Model 2 supporting the partial mediator role of assertiveness. In Model 2, mindfulness positively predicted assertiveness ($\beta = 0.63$, $p < 0.001$), resilience ($\beta = 0.03$, $p < 0.05$), subjective well-being ($\beta = 0.40$, $p < 0.001$), and psychological well-being ($\beta = 0.09$, $p < 0.001$). Assertiveness positively predicted resilience ($\beta = 0.09$, $p < 0.05$), subjective well-being ($\beta = 0.35$, $p < 0.001$) and psychological well-being ($\beta = 0.11$, $p < 0.001$) as Figure 1 demonstrates. More importantly, assertiveness mediated the



relationship between mindfulness, resilience, subjective and psychological well-being. 95 % bias-corrected bootstrapping procedure was applied to determine the significance of mediating effect and results indicated assertiveness significantly mediated in the relationship between mindfulness and resilience (95% CI=[0.036, 0.085]), subjective well-being (95% CI=[0.146, 0.356]), and psychological well-being (95% CI=[0.043, 0.112]).

Note. Path coefficients were standardized; $p < .05$. $p^{***} < .001$.

Figure 1. The proposed structural model demonstrating relationships between latent variables

DISCUSSION, CONCLUSION & SUGGESTIONS

Mindfulness is the ability to be fully present in the moment and awareness through paying attention on purpose (Kabat-Zinn, 2003). Concept mindfulness is associated with beneficial psychological and behavioral outcomes and particularly increased wellbeing and mental health. In order to obtain a better understanding of the concept, this study intends to examine the mediating effect of assertiveness in the association between mindfulness, resilience, subjective wellbeing, and psychological well-being. The study demonstrated a) significant and positive associations between assertiveness, mindfulness, resilience, subjective well-being, and psychological well-being. The main results of the study revealed that b)

assertiveness mediated the relationship between mindfulness and resilience, subjective well-being, and psychological well-being.

For the first hypothesis of the study, participants who reported higher levels of assertiveness and mindfulness also reported higher levels of resilience, subjective, and psychological well-being. Essentially, findings are in line with the literature. For instance, previous studies demonstrated that greater levels of mindfulness associates with greater levels of resilience (Freligh & Debb, 2019), positive affect (McLaughlin, Luberto, O'Bryan, Kraemer, & McLeish, 2019), negative affect (Keng & Ang, 2019), and life satisfaction (Wang & Kong, 2019). To the best of knowledge, no studies to date documented the relationship between assertiveness and psychological well-being (eudaimonic well-being). In this regard, the results of the study are noteworthy and in line with the conceptual framework of the concepts. Conceptually, assertiveness refers to asserting one's rights, interests, thoughts, and feelings without anxiety while psychological well-being conveys the longer term of the well-being involving in possession of purposes and aims in life, finding meaning and reaching one's true capacity (Ryff, 1995). Thus, the results suggest that individuals acting assertively also demonstrate the features that align with longer-term well-being. Regarding the dimensional levels, findings indicated that the most associated aspect of psychological well-being with assertiveness is the component of environmental mastery, revealing that participants with greater ability to express themselves also experience feelings of competency to cope with problems and adapt to situations without being overwhelmed by stress. In terms of the associations between assertiveness and other study variables, the results demonstrated that assertiveness correlates significantly and positively with mindfulness, positive affect, life satisfaction, resilience while negative correlations were found with negative affect. Although the results are in line with our hypotheses, the literature cites studies with contradictory findings. For instance, one study by Jagdish (1993) reported no association between assertiveness and none with positive or negative affect. On the contrary, Paezy, Shahraray and Abdi (2010) found that the assertiveness training program increased participants' levels of happiness, revealing the positive association between assertiveness and happiness, which is considered as an aspect of positive affect.

The main findings of the study derived from the mediation analysis. Structure equation modeling analyses demonstrated that assertiveness mediated the relationship between mindfulness, resilience, subjective well-being, and psychological well-being. The results show that being fully present at the moment directly influences individuals to experience greater levels of resilience, subjective, and psychological well-being. Additional to this path, high levels of mindfulness contribute to greater levels of assertiveness, which in turn contribute to high levels of resilience, subjective and psychological well-being. Thus, results speak that mindfulness contributes to various sorts of well-being through assertiveness and highlight the importance of the concept of individuals' well-being and mental health.

Given the scarcity of research on the relationship between assertiveness, mindfulness, resilience, subjective well-being, and psychological well-being, the results of this study are noteworthy as they highlight the notion of assertiveness as a mediator source on the relationship between mindfulness and an array of well-being indices. Although the current study sheds light on the underlying mechanism behind such a relationship, no study is devoid of limitations. First, the current study solely focused on university students which might restrict the generalizability of the results. Another limitation of the study emerged due to the cross-sectional nature of the study design. In this regard, replication of the study with longitudinal and experimental design might be fruitful for causal inferences.

Limitations notwithstanding, findings of the current study contributed to the literature on providing first-ever results in regards to the relationship between assertiveness, mindfulness, resilience, subjective well-being, and psychological well-being. First, the current findings indicated the positive and significant associations between assertiveness, mindfulness, resilience, positive affect, life satisfaction, and factors that contribute to psychological well-being while negative correlations were found between the same variables and negative affect, as hypothesized. Second, findings of the current study demonstrated that assertiveness accounted for a significant amount of variance in the relationship between mindfulness and resilience, subjective and psychological well-being.

Overall, the results speak that mindfulness contributes to some of the wellbeing indices through assertiveness. Although such a relationship does not imply causal inferences, the findings clearly indicate that assertiveness, an overlooked construct in psychology and counseling research, is important for the well-being of individuals. Thus, it might be fruitful to include assertiveness training in intervention studies aiming to improve mental health, such as resilience, subjective and psychological well-being. Especially in universities, counseling services may impact in supporting university students through mindfulness and assertiveness programs.

REFERENCES

- Akin, A. (2008). The scales of psychological well-being: A study of validity and reliability. *Educational Sciences: Theory and Practice*, 8(3), 741-750.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411.
- Bacchi, S., & Licinio, J. (2017). Resilience and psychological distress in psychology and medical students. *Academic Psychiatry*, 41(2), 185-188.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13(1), 27-45.
- Belen, H. & Yildirim, M. (2019). Mindfulness and subjective well-being: Mediating effect of assertiveness. Paper presented at the 6th International Eurasian Educational Research Congress, Ankara, Turkey. Retrieved from https://www.researchgate.net/publication/334502116_Mindfulness_and_Subjective_Well-being_Mediating_Effect_of_Assertiveness
- Belen, H. (2019). Assertiveness mediates the relationship between mindfulness, resilience and life satisfaction. Paper presented at the 3rd Eurasian Congress on Positive Psychology, Istanbul, Turkey. Retrieved from https://www.researchgate.net/publication/333295681_Assertiveness_Mediates_the_Relationship_between_Mindfulness_Resilience_and_Life_Satisfaction
- Bernabé, M., & Botia, J. M. (2016). Resilience as a mediator in emotional social support's relationship with occupational psychology health in firefighters. *Journal of Health Psychology*, 21(8), 1778-1786.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230-241.
- Braun, S. S., Roeser, R. W., Mashburn, A. J., & Skinner, E. (2019). Middle school teachers' mindfulness, occupational health and well-being, and the quality of teacher-student interactions. *Mindfulness*, 10(2), 245-255.
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211-237.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822.

- Catak, P. D. (2012). The Turkish version of mindful attention awareness scale: Preliminary findings. *Mindfulness*, 3(1), 1-9.
- de Acedo Lizarraga, M. L. S., Ugarte, M. D., Cardelle-Elawar, M., Iriarte, M. D., & de Acedo Baquedano, M. T. S. (2003). Enhancement of self-regulation, assertiveness, and empathy. *Learning and Instruction*, 13(4), 423-439.
- Deniz, M. E., Erus, S. M., & Büyükcebeci, A. (2017). Bilinçli farkındalık ile psikolojik iyi oluş ilişkisinde duygusal zekanın aracılık rolü. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 7(47), 17-31.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Doğan, T. (2015). Adaptation of the Brief Resilience Scale into Turkish: A validity and reliability study. *The Journal of Happiness & Well-Being*, 3(1), 93-102.
- Durak, M., Senol-Durak, E., & Gencoz, T. (2010). Psychometric properties of the satisfaction with life scale among Turkish university students, correctional officers, and elderly adults. *Social Indicators Research*, 99(3), 413-429.
- Eldeleklioglu, J., & Yildiz, M. (2020). Expressing emotions, resilience and subjective well-being: An investigation with structural equation modeling. *International Education Studies*, 13(6), 48-61.
- Feldman, G., Hayes, A., Kumar, S., Greeson, J., & Laurenceau, J. P. (2007). Mindfulness and emotion regulation: The development and initial validation of the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R). *Journal of Psychopathology and Behavioral Assessment*, 29(3), 177.
- Fogarty, A., Wood, C. E., Giallo, R., Kaufman, J., & Hansen, M. (2019). Factors promoting emotional-behavioural resilience and adjustment in children exposed to intimate partner violence: A systematic review. *Australian Journal of Psychology*, 71(4), 375-389.
- Freligh, C. B., & Debb, S. M. (2019). Nonreactivity and resilience to stress: Gauging the mindfulness of African American college students. *Mindfulness*, 10(11), 2302-2311.
- Freligh, C. B., & Debb, S. M. (2019). Nonreactivity and resilience to stress: Gauging the mindfulness of African American college students. *Mindfulness*, 10(11), 2302-2311.
- Ge, J., Wu, J., Li, K., & Zheng, Y. (2019). Self-compassion and subjective well-being mediates the impact of mindfulness on balanced time perspective in Chinese college students. *Frontiers in Psychology*, 10, 367.
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. Sage Publications.
- Hanley, A., Warner, A., & Garland, E. L. (2015). Associations between mindfulness, psychological well-being, and subjective well-being with respect to contemplative practice. *Journal of Happiness Studies*, 16(6), 1423-1436.
- Imamoğlu, E. O. (2004). Self-construal correlates of well-being. Unpublished manuscript
- İşgör, İ. Y. (2017). Merhametin öznel iyi oluş üzerindeki yordayıcı etkisinin incelenmesi (Investigating the predictive effect of compassion on subjective well-being). *Gaziantep University Journal of Social Sciences*, 16, 425-436.
- Jin, Y., Zhang, M., Wang, Y., & An, J. (2020). The relationship between trait mindfulness, loneliness, regulatory emotional self-efficacy, and subjective well-being. *Personality and Individual Differences*, 154, 109650.
- Keng, S. L., & Ang, Q. (2019). Effects of mindfulness on negative affect, body dissatisfaction, and disordered eating urges. *Mindfulness*, 10(9), 1779-1791.
- Kline, R. B. (2011). *Convergence of structural equation modeling and multilevel modeling*. Guilford Press
- Kumar, S., Feldman, G., & Hayes, A. (2008). Changes in mindfulness and emotion regulation in an exposure-based cognitive therapy for depression. *Cognitive Therapy and Research*, 32(6), 734.
- Matsunaga, M. (2008). Item parceling in structural equation modeling: A primer. *Communication Methods and Measures*, 2(4), 260-293.

- McLaughlin, L. E., Luberto, C. M., O'Bryan, E. M., Kraemer, K. M., & McLeish, A. C. (2019). The indirect effect of positive affect in the relationship between trait mindfulness and emotion dysregulation. *Personality and Individual Differences, 145*, 70-74.
- Paezy, M., Shahraray, M., & Abdi, B. (2010). Investigating the impact of assertiveness training on assertiveness, subjective well-being and academic achievement of Iranian female secondary students. *Procedia-Social and Behavioral Sciences, 5*, 1447-1450.
- Pidgeon, A. M., & Keyes, M. (2014). Relationship between resilience, mindfulness, and psychological well-being in university students. *International Journal of Liberal Arts and Social Science, 2*(5), 27-32.
- Ramadas, E., & Simões, S. C. (2019). The relationship between mindfulness, spiritual well-being and chronic depression: Different predictors in distinct phases of treatment. *Counseling and Psychotherapy Research, 19*(2), 138-148.
- Ramos-Díaz, E., Rodríguez-Fernández, A., Axpe, I., & Ferrara, M. (2019). Perceived emotional intelligence and life satisfaction among adolescent students: The Mediating role of resilience. *Journal of Happiness Studies, 20*(8), 2489-2506.
- Rathus, S. A. (1973). A 30-item schedule for assessing assertive behavior. *Behavior Therapy, 4*(3), 398-406.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*(1), 141-166.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069.
- Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics, 83*(1), 10-28.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719.
- Şahin, A. (2019). Üniversite öğrencilerinde bilinçli farkındalık ile yaşam doyumu ve iyi oluş arasındaki ilişkiler. *Üsküdar Üniversitesi Sosyal Bilimler Dergisi, 8*(8), 151-176.
- Sarkova, M., Bacikova-Sleskova, M., Orosova, O., Madarasova Geckova, A., Katreniakova, Z., Klein, D., ... & van Dijk, J. P. (2013). Associations between assertiveness, psychological well-being, and self-esteem in adolescents. *Journal of Applied Social Psychology, 43*(1), 147-154.
- Satici, S. A. (2016). Psychological vulnerability, resilience, and subjective well-being: The mediating role of hope. *Personality and Individual Differences, 102*, 68-73.
- Schutte, N. S., & Malouff, J. M. (2011). Emotional intelligence mediates the relationship between mindfulness and subjective well-being. *Personality and Individual Differences, 50*(7), 1116-1119.
- Seligman, M. E.P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. Free Press
- Senders, A., Bourdette, D., Hanes, D., Yadav, V., & Shinto, L. (2014). Perceived stress in multiple sclerosis: The potential role of mindfulness in health and wellbeing. *Journal of Evidence-Based Complementary & Alternative Medicine, 19*(2), 104-111.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine, 15*(3), 194-200.
- Speed, B. C., Goldstein, B. L., & Goldfried, M. R. (2018). Assertiveness training: A forgotten evidence-based treatment. *Clinical Psychology: Science and Practice, 25*(1), e12216.
- Stevenson, J. C., Millings, A., & Emerson, L. M. (2019). Psychological well-being and coping: The predictive value of adult attachment, dispositional mindfulness, and emotion regulation. *Mindfulness, 10*(2), 256-271.

- Sünbül, Z. A., & Güneri, O. Y. (2019). The relationship between mindfulness and resilience: The mediating role of self compassion and emotion regulation in a sample of underprivileged Turkish adolescents. *Personality and Individual Differences, 139*, 337-342.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Pearson.
- Thompson, R. W., Arnkoff, D. B., & Glass, C. R. (2011). Conceptualizing mindfulness and acceptance as components of psychological resilience to trauma. *Trauma, Violence, & Abuse, 12*(4), 220-235.
- Uygur, S. S. (2017). Ergenlerin bilinçli farkındalığının yordanmasında başa çıkma stilleri, empati ve duygusal düzenlemenin rolü. *Türk Psikolojik Danışma ve Rehberlik Dergisi, 9*(55), 1247-1279.
- Voci, A., Veneziani, C. A., & Fuochi, G. (2019). Relating mindfulness, heartfulness, and psychological well-being: The Role of self-compassion and gratitude. *Mindfulness, 10*(2), 339-351.
- Voltan, N. (1980). Rathus assertiveness inventory: Validity and reliability study. *Psychology Journal, 10*, 23-25.
- Walsh, F. (2016). Family resilience: A developmental systems framework. *European Journal of Developmental Psychology, 13*(3), 313-324.
- Wang, K., & Kong, F. (2019). Linking trait mindfulness to life satisfaction in adolescents: The mediating role of resilience and self-esteem. *Child Indicators Research, 1-15*.
- Whitehead, R., Bates, G., Elphinstone, B., Yang, Y., & Murray, G. (2019). Nonattachment mediates the relationship between mindfulness and psychological well-being, subjective well-being, and depression, anxiety and stress. *Journal of Happiness Studies, 20*(7), 2141-2158.
- Wilson, J. M., Weiss, A., & Shook, N. J. (2020). Mindfulness, self-compassion, and savoring: Factors that explain the relation between perceived social support and well-being. *Personality and Individual Differences, 152*, 109568.
- Zenner, C., Herrlebenkurz, S., & Walach, H. (2014). Mindfulness-based interventions in schools-a systematic review and meta-analysis. *Frontiers in Psychology, 5*, 603.

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Author Contributions

HB: Idea and design, data collection and analysis, interpretation of findings, reporting of the article.

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Ethical Statement

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