VOL 5(1)

e-ISSN 2602-3733

Research on Education and Psychology (REP)

Research on Education and Psychology (REP)
Volume: 5 • Number: 1 • 2021 • 1-131

URL: http://dergipark.gov.tr/rep
Email: editor.journalrep@gmail.com

Table of Contents

Research Articles

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: November 18, 2020
Accepted: April 22, 2021
http:// dergipark.org.tr/rep

e-ISSN: 2602-3733

June 2021 ◆ 5(1) ◆ 1-13

Research Article

Published: 06.30.2021

A Scale Development Study: Validity and Reliability of the Educational Skills Scale

Aliye Çayır[1]

Necmettin Erbakan University

Sevim Ulupınar[2]

Istanbul University Cerrahpaşa

Abstract

The purpose of this study is to develop a valid and reliable measurement instrument towards the educational skills of instructors. This is a methodological study. The sample of the study consisted of 380 instructors who were employed at a university. During the scale development process, an item pool was created by reviewing the literature, content and construct validity and item reliability analyses were carried out. The data were collected by using a Personal Information Form and the Educational Skills Scale Draft Form. In the study, the item pool consisting of 86 items was rearranged in line with expert opinions and according to the results of preliminary implementation. For the Educational Skills Draft Scale with 58 items remaining, the Kaiser-Meyer-Olkin coefficient was 0.89 and the adequacy of the sample size was confirmed. According to the Bartlett's test results ($p<0.05$) there was correlation among the items. As a result of the exploratory factor analysis, factors as planning, implementation and assessment were obtained. The three factors of the scale were found to explain 42.32% of the total variance. The first factor explained 28.47%, the second factor explained 7.81%, and the third factor explained 6.02% of the total variance. The Confirmatory Factor Analysis (CFA) showed that the factorial structure revealed by Exploratory Factor Analysis (EFA) was confirmed, and the factor loads varied between 0.44 and 0.79. For the 5-point Likert-type Educational Skills Draft Scale with 38 items after analyses, the Cronbach's Alpha value was found 0.93. The Cronbach's alpha values of three factors were 0.88 for the planning dimension, 0.84 for the implementation dimension and 0.87 for the assessment dimension. It was concluded that the scale that was developed is a valid and reliable measurement instrument in determining educational skills.

Key Words

Educational skills instructor • Reliability • Scale • Validity

[1] **Correspondance to:** Faculty of Nursing, Necmettin Erbakan University, Konya, Turkey. E-mail: aliye.cyr@gmail.com **ORCID:** 0000-0003-0760-4248

[2] Florence Nightingale Faculty of Nursing, Istanbul University Cerrahpasa, Istanbul, Turkey. E-mail: sevim.ulupinar@istanbul.edu.tr **ORCID:** 0000-0003-1208-2042

Citation: Çayır, A., & Ulupınar, S. (2021). A scale development study: Validity and reliability of the Educational Skills Scale. *Research on Education and Psychology (REP), 5*(1), 1-13.

With the programs they offer, universities are autonomous, qualified and free higher education units that provide the society with human capital with international qualities, can conduct research-development and innovation on an international scale, produce scientific knowledge and technology, publish on an international level and provide supervision support (Aktan, 2007; Aslantaş, 2011; Bergan & Damain, 2010; Eurydice, 2017; Telli Yamamoto, 2018). Universities are institutions that take part in scientific research and development work, direct the field of education-instruction, plan, implement and assess instruction, provide profession-related knowledge and skills and offer services towards the needs of the society (Aslantaş, 2011; Chan et al., 2014; Ergün, 2001; Telli Yamamoto, 2018).

For universities to be able to provide the aforementioned services there is a need for instructors who are qualified in their field. Instructors, who have an important place in achievement of making universities functional, constitute quantitatively and qualitatively competent labor force that may provide the university with the quality of being a thinking, researching and producing institution (Aslantaş, 2011; Esen & Esen, 2015). Instructors working at universities have three main duties as education-instruction, research and service (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2009). Among these three important responsibilities, while scientific research is seen as the most important task, the education-instruction duty is usually overlooked. While assessing instructors, the quality and quantity of their scientific research are prioritized, whereas assessment about their education-instruction skills is neglected (Başbuğ & Ünsal, 2012; Ergün, 200; Esen & Esen, 2015; Kalaycı, 2009). Moreover, it is clear that the competent educational skills of instructors, in addition to their scientific capacity, will be effective in improvement of the quality of educational institutes (Ergün, 2003; Sökmen, 2001; Vatansever & Durak, 2007). Additionally, it is also important for the instructor to have a set of skills such as understanding the learners, being able to create interest, effective communication, being able to determine methods based on the level of the learner, impartiality and being patient and democratic. It should be kept in mind that the instructor has the identity of both a scientist and an educator (Aslantaş, 2011; Erginer & Dursun, 2005).

The educator role of an instructor consists of several components (Jackson, 2006; Vatansever & Durak, 2007). Educational skills have an important place among these components. Functions of instructors towards their educational skills are expressed to include sufficient field knowledge, ability to effectively communicate to learners, classroom management, effective planning of instruction activities, utilization of instruction technologies, effective usage of instruction methods and techniques, objective assessment of education and having a democratic approach (Aslantaş, 2011; Davis et al., 2005; Esen & Esen 2015; Ulupınar, 1998; Vatansever & Durak, 2007). New approaches, changes and technological developments that are adopted in the field of education reveal the importance of educational skills for training the labor force that is needed by today's society (Bayık, 2001; Davis et al., 2005). This is why it is important to determine and develop the skills of instructors towards their educational capacities. Through the education in master's and doctoral degrees, it is aimed to train instructors that facilitate production, development and prevalence of knowledge (Ağıralioğlu, 2013; Karadağ & Özdemir, 2017; Matas, 2012).

Capacities that are aimed to be provided in postgraduate trainings may be listed to include field-specific knowledge, scientific research skills, critical thinking, instruction skills and measurement and assessment (Bergan & Domain, 2010; Djelic, 2008; Erdem, 2015). Higher education institutions that have education-instruction teams that are on an adequate level in terms of quality and quantity may train the labor force that can think, inquire and produce (Aslantaş, 2011). While the literature review revealed measurement instruments that measure the performance of instructors towards education and instruction, no measurement instruments that directly measured educational skills were encountered. The study was carried out with the purpose of developing a valid and reliable measurement tool towards the educational skills of instructors to meet this necessity.

Method

Research Model

This study which aims to develop an educational skills scale is a methodological type (Bayram, 2017; DeVellis, 2014; Özdamar, 2016).

Study Group

The population of the study consisted of all instructors of a university (1823 instructors). In scale validity and reliability studies, it is stated that reaching people 3-10 times as many as the number of items in the scale is sufficient (DeVellis, 2014; Özdamar, 2016). The draft scale on educational skills consists of 58 items. 380 instructors (6.5 times the number of items) who agreed to participate constituted the study group of the study. The the study group size in the study was deemed to be sufficient for factor analysis (Tabachnick & Fidell, 2001).

Table 1 shows the sociodemographic characteristics of the participants. Accordingly, the mean age of the participants was 36.8, 50.5% were female, 69% had doctoral degrees and 31.3% had the title of assistant professor. The mean amount of professional experience for the instructors was 9.21 years (Table 1).

Table 1

Demographic Characteristics of Instructors

Demographic Characteristics	**n**	**%**
Age		
20-29 age	78	20.5
30-39 age	184	48.4
40-49 age	72	18.9
50-59 age	35	9.2
60 and older age	11	2.9
The average age: 36.8±9.4 (23 age-70age)		
Gender		
Female	192	50.5
Male	188	49.5
Level of Education		
Bachelaor's Degree	25	6.6
Master's Degree	93	24.4
Doctorate Degree	262	69.0
Academic Title		
Professor	33	8.7
Associate Professor	37	9.7
Assistant Professor	119	31.3
Lecturer	63	16.6
Research Assistant	128	33.7

Academic Experience		
1-3 years	98	25.78
4-10 years	167	43.94
11 years and more	115	30.28
Average experience: 9.21±8.35 (min:1year – max:42 year)		

Measurement Tools

The data were collected by the researchers with a Personal Information Form consisting of nine questions and the Educational Skills Draft Scale between January and May 2018 by making appointments with the instructors. The data of the study were collected by using the Personal Information Form and the Educational Skills Draft Scale.

Information Form

It consisted of five questions (age, gender, level of education, academic title and academic experience) on the demographic characteristics of the participants. The information form was used to show the suitability of the characteristics of the study group for the scale.

Educational Skills Scale

The first form of the prepared draft scale consisted of 80 items. After collecting expert opinions, the number of items was reduced to 58. As a result of completion of validity and reliability analyses, the Educational Skills Scale took its final form consisting of 38 items and 3 factors. The Educational Skills scale contains activities related to the planning, implementation and assessment stages of the education-instruction process. Each item in the 5-point Likert-type scale is scored as 1-5 points: 1- Never, 2- Rarely, 3- Sometimes, 4- Often, 5- Always. As the score of the scale increases, it is concluded that the frequency of realization of educational skills also increases.

Data Analysis

The data were analyzed by an expert in statistics by using the AMOS and SPSS software. The content validity of the scale was determined by testing the expert opinions content validity index. Kaiser-Meyer-Olkin (KMO) test and Bartlett's Sphericity test were used to determine the suitability of the data and the adequacy of the sample size, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used to determine the validity, and Cronbach's alpha reliability coefficient, Spearman-Brown and Guttmann Split-Half analyses were used to test the reliability of the scale.

Findings

Content Validty

At the first stage, a detailed literature review was carried out to determine the educational skills of the instructors. In this context, studies in this field that were carried out domestically and internationally were examined, and the statements that could be used in the scale were determined. In line with the literature, an item pool towards the educational skills of instructors with 86 statements and 3 factors was created. The draft scale was submitted for expert opinion (20 instructors) for testing scale, language and content validity. The experts were asked to assess each item in terms of language, content and suitability for the factor that is relevant. 4-point

Likert-type scoring (1=not suitable, 2=somewhat suitable, 3=suitable, 4=very suitable) was used in the assessment. Based on the opinions of the experts, the content validity score of each of the 86 statements was determined. The scoring was made by dividing the total number of experts who provided positive responses for each item by the total number of experts minus one. Items with coefficients of 0.80 were removed from the scale, and a 58- item trial form was obtained.

Factor Analysis

Assessment of the suitability of the data for factor analysis: Before conducting factor analysis, to determine the suitability of the data, Measure of Sampling Adequacy (Kaiser-Meyer-Olkin, KMO) and Bartlett's Sphericity test, which shows the correlation of items to each other, were carried out. The KMO value was found as 0.891. KMO showed that the sample size was "good" for factor analysis (Özdamar, 2016). The result of the Bartlett's test was found significant (x^2=6864.251, p=0.000) (Tabachnick & Fidell, 2001).

Determining factorial design: Factor analysis was carried out with the purpose of revealing the construct validity of the scale and being able to determine the factor loads of the items and present dimensions. To determine the factors of the scale, an Exploratory Factor Analysis (EFA) was carried out by conducting principal components analysis with varimax rotation. The factor load in the analysis was set as 0.40 as the minimum (Büyüköztürk, 2006).

As a result of the EFA, the scale was found to have 8 factors with eigenvalues of larger than 1. These 8 factors explained 60.69% of the total variance. 20 items which were not loaded on any factor and had factor loads of under 0.40 were removed from the analyses. The EFA was repeated by limiting the number of factors to the three dimensions that were determined at the design stage and by considering the literature. The three factors of the scale were found to explain 42.32% of the total variance. The first factor explained 28.47%, the second factor explained 7.81%, and the third factor explained 6.02% of the total variance. According to the results of the analysis, all items were in the planned dimensions (Table 2).

Confirmatory Factor Analysis: It was determined that the item-dimension relationship obtained with EFA and the distribution of the items that were formed at the draft stage of the scale were consistent. The dimensions that were obtained as a result of the analysis were named as "planning", "implementation" and "assessment" in suitability with the planning stage of the study. At this stage of the study, the suitability of the 3-factor structure that emerged as a result of EFA was tested. The Confirmatory Factor Analysis (CFA) showed that the factorial structure revealed by EFA was confirmed, and the factor loads varied between 0.44 and 0.79 (Table 3). Since our aim was to determine the frequency of displaying educational skills, no reverse item was used in the scale (DeVellis, 2014; Özdamar, 2016).

Table 2

Item Size Relationship EFA Analysis Results and Factor Loads Obtained as a Result of CFA

Lower Dimensions	Scale Items	EFA Analysis Results		Factor Loads Obtained by CFA	
		Factor Load	Explained Variance	Factor Load	t Value
Planning	Item 1	.587	%28.47	.553	7.898
	Item 2	.694		.627	8.529
	Item 3	.487		.509	7.550
	Item 4	.742		.781	9.094
	Item 5	.759		.797	9.176
	Item 6	.640		.634	8.340
	Item 7	.607		.609	8.394
	Item 8	.451		.536	7.820
	Item 9	.566		.602	8.535
	Item 10	.536		.564	8.266
	Item 11	.498		.518	10.475
	Item 12	.513		.502	10.151
Implementation	Item 13	.616	%7.81	.504	7.498
	Item 14	.510		.482	7.171
	Item 15	.682		.595	8.195
	Item 16	.737		.676	8.917
	Item 17	.700		.721	9.091
	Item 18	.661		.675	8.738
	Item 19	.447		.525	7.480
	Item 20	.451		.465	6.882
	Item 21	.475		.596	7.945
	Item 22	.483		.541	7.612
	Item 23	.486		.528	7.467
Assessment	Item 24	.439	%6.02	.644	13.093
	Item 25	.493		.668	13.581
	Item 26	.503		.627	10.717
	Item 27	.531		.492	8.331
	Item 28	.479		.579	9.453
	Item 29	.450		.571	9.409
	Item 30	.548		.472	7.911
	Item 31	.443		.590	9.897
	Item 32	.544		.620	10.175
	Item 33	.509		.465	7.892
	Item 34	.525		.557	9.147
	Item 35	.647		.528	8.737
	Item 36	.573		.442	7.357
	Item 37	.641		.509	8.423
	Item 38	.698		.589	9.535

Figure 1

Confirmatory Factor Analysis Model

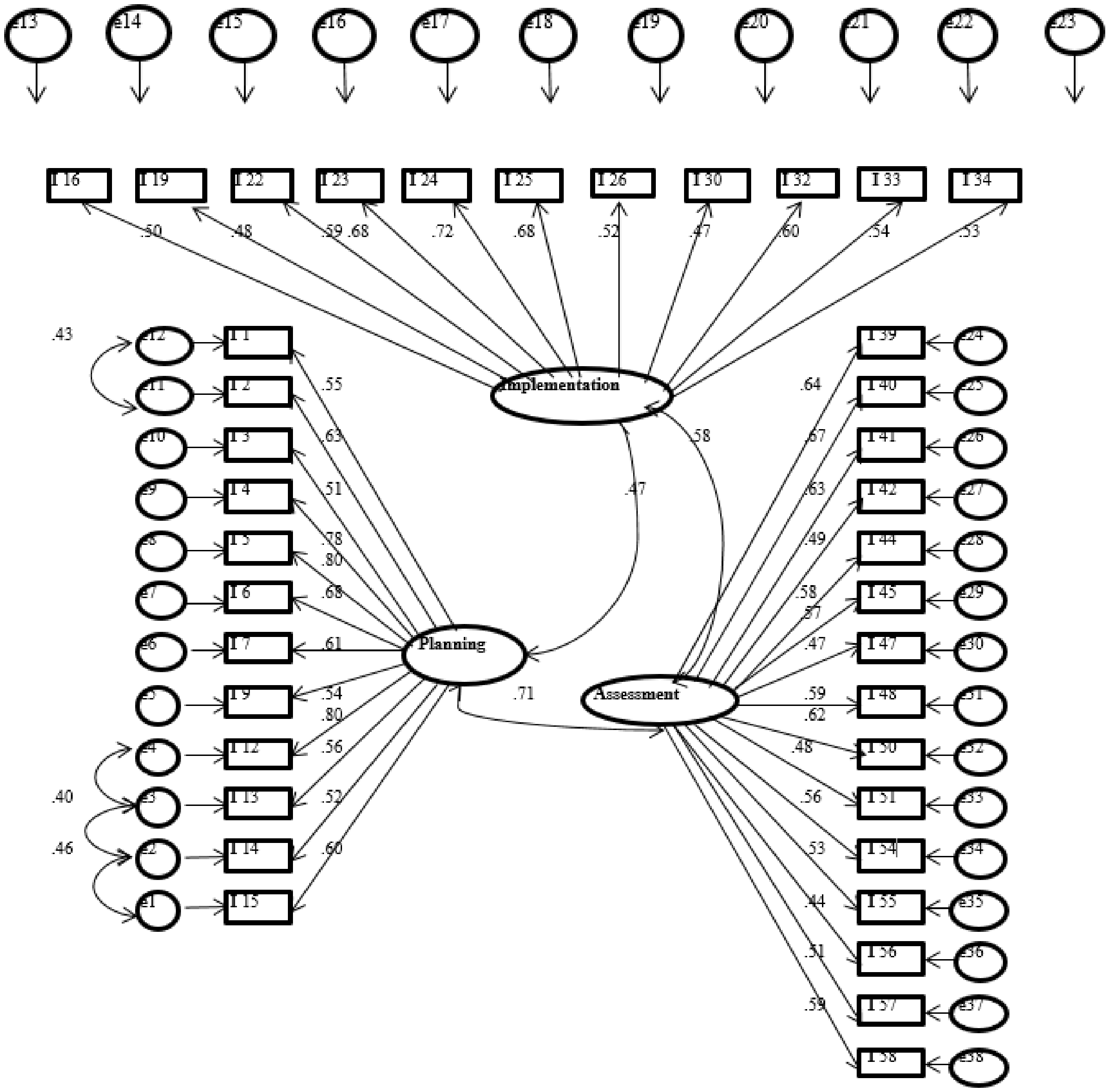


Figure 1 shows the model that was obtained by CFA. Considering the goodness of fit values for Figure 1, the result of $x^2/sd = 2.83$ ($3 \leq$ acceptable ≤ 5, good fit ≤ 3) was obtained. The Root Mean Square Error of Approximation (RMSEA) value was 0.07, while the Root Mean Square Residual (RMR) was found as 0.06 ($0.05 \leq$ acceptable ≤ 0.08, good fit ≥ 0.08). It is understood that the model adapts to the desired level (Özdamar, 2016). The model has not been modified.

Reliability

Table 4 shows the correlation coefficients regarding the total scale and its dimensions based on their reliability analyses and those among the factors. The Cronbach's alpha coefficients were 0.88 for the planning dimension, 0.84 for the implementation dimension and 0.87 for the assessment dimension. For the total scale, the Cronbach's alpha internal consistency coefficient was 0.93, Spearman-Brown coefficient was 0.81, and

Guttmann Split-Half coefficient was 0.80. The relationship between the scale and dimensions also examined in the analyses that were carried out. As a result of the analysis, the factors were found to have a positive and significant relationship with each other. Additionally, the item-total correlation value of each item was 0.30 or higher (Table 4).

Table 4

Alpha Coefficients and Correlations of the Scales

	Planning	Implementation	Assessment
Planning (.879)	-	.493**	.611**
Implementation (.840)	.493**	-	.528**
Assessment (.874)	.611**	.528**	-
Educational Skills Scale (.927)	.840**	.734**	.908**

Discussion

In this study, it was aimed to develop a measurement instrument whose validity and reliability in measuring the educational skills that are used by instructions at universities while they are conducting their instruction activities. It is believed that the educational skills scale that was developed will help instructions gain awareness on their educational skills and know about their shortcomings or aspects that could be improved. While the scale provides instructions with the opportunity to decide upon what type of development and transformation they could achieve in line with their needs on an individual level, it will also provide opportunities towards organizing activities towards educational skills on an institutional level.

Among the characteristics of an instructor related to education-instruction, it is stated that personality structure, professional qualification, skills of effective communication with learners, classroom management, measurement, assessment, field-specific competency, effective presentation skills and being accessible and reliable are important issues (Brechelmacheret al., 2015; Helterbran, 2008; Özdemir & Üzel, 2010; Ulupınar, 1998; Wood & Su, 2017). Studies that were carried out with students (Aslantaş, 2011; Özçakır & Sümen Kesten, 2014) reported that instructors did not use instruction strategies and methods to a sufficient extent, and they were not competent in measurement and assessment. Considering the expectations of students, in terms of self-awareness of instructions and their acts accordingly, it is believed that the scale could be a suitable assessment instrument. Studies have stated that one of the most important performance dimensions perceived by instructors is facilitation of education-instruction activities (Esen & Esen, 2015), and education-instruction activities should be considered among the performance criteria of instructors (Başbuğ & Ünsal, 2010; Demir & Acar, 2011). Our study is important in terms of providing criteria regarding determination and proof of the aforementioned performance criteria.

While developing the scale, firstly, an item pool consisting of 86 items was created by reviewing the relevant literature (Aslantaş, 2011; Brown, 2018; Doğramacı, 2007; Eurydice, 2010; Eurydice, 2017; Kashkan & Egorova, 2015; Marginson, 2016; Telli Yamamoto, 2018; UNESCO, 1998; World Health Organization [WHO], 2016; Higher Education Academic Evaluation and Quality Improvement Commission [YÖDEK], 2007). For content validity, the form was submitted for expert opinion, and the content validity score of each item was calculated. The items that had content validity scores of less than 0.80 were removed. Based on the literature

(DeVellis, 2014; Özdamar, 2016; Tabachnick & Fidell, 2001), it may be stated that the draft scale consisting of the remaining 58 items had content validity.

The results of the Kaiser-Meyer-Olkin (KMO) and Bartlett's Sphericity tests that were conducted to reveal the construct validity of the scale demonstrated that the sample size was "good" in terms of suitability for factor analysis (DeVellis, 2014; Tabachnick & Fidell, 2001). According to the Bartlett's test results, the scale was found to be effective in measuring the planned dimensions of it (George & Mallery, 2001; Özdamar, 2016).

To determine the factors of the scale, an Exploratory Factor Analysis (EFA) was carried out by conducting principal components analysis with varimax rotation. The factor load in the analysis was set as 0.40 as the minimum (Büyüköztürk, 2006; DeVellis, 2014). The number of factors was limited to three by considering the information on the literature and based on the objective of the study, while three factors of the scale were found to explain 42.32% of the total variance. In multi-dimensional scales, the acceptable rate of explained variance is expected to be in the range of 40-60% (Tavşancıl, 2002). The result that was obtained showed that the ratio of explained variance was sufficient.

To test the suitability of the three-factor structure that was revealed as a result of the EFA, Confirmatory Factor Analysis (CFA) was carried out. The CFA showed that the factor loads varied between 0.44 and 0.79. This result showed that the dimensions constructed based on the literature were also confirmed statistically (Bayram, 2017; DeVellis, 2014; Özdamar, 2016). The dimensions that were obtained were named as planning, implementation and assessment in suitability with the first form of the study that was designed. As a result of the analyses, it was determined that the Educational Skills Scale and its dimensions had validity and reliability.

Reliability analysis and item analysis are methods that allow assessment of a scale in terms of its construct, content, structure and its power and capacity in questioning the phenomenonit aims to measure (DeVellis, 2014; Özdamar, 2016). According to the results of the analyses that were carried out to test the reliability of the Educational Skills Scale, the Cronbach's alpha internal consistency coefficient for the total scale was 0.93, while this coefficient was 0.88 for the planning dimension, 0.84 f or the implementation dimension and 0.87 for the assessment dimension. Bayram (2017) stated that it is sufficient to have a reliability coefficient of higher than 0.70. These results showed that the reliability coefficients of the scale and its dimension were high, and the scale is a reliable measurement instrument for educational skills.

Previous studies (Bergan & Domain, 2010; Djelic, 2008) listed the capacities that an instructor should gain while being trained in postgraduate programs as basic field-specific theory-concept knowledge, field-specific implementation, putting theoretical knowledge into practice, scientific research skills, critical thinking and skills related to education-instruction activities. It was emphasized that, in training instructors that are capable in terms of quality and quantity, educational capacities should be provided to instructors by considering current necessities and requirements (Erdem, 2015). It is believed that the scale that was developed here will be beneficial in terms of training education-instruction teams that are capable in terms of quality.

Consequently, as a result of the analyses, the Educational Skills Scale was found to be a valid and reliable measurement instrument. This scale may be used to determine the frequency of instructors to use their educational skills. Self-assessment of instructors regarding their educational skills and their increased awareness will contribute to their self development. In addition to the Educational Skills Scale, it is believed that development of scales that cover the views of learners and administrator and usage of sources such as portfolios and career plans will contribute to multidimensional assessment of education and instruction activities and increasing the quality of education.

References

Ağıralioğlu, N. (2013). Türkiye'de lisansüstü öğretim. *Yükseköğretim ve Bilim Dergisi,* 3(1),1-9 Erişim 15.06.2019. http://doi.org/10.5961/jhes.2013.053

Aktan, C. (2007). *Change in higher education: Global trends and new paradigms*. Yaşar University Publication. http://eds.sakarya.edu.tr/sites/eds.sakarya.edu.tr/file/3/aktan-trendler

Aslantaş, H.İ. (2011). Student vıews regardıng teachıng staffs' suffıcencıes ın teachıng strategıes- methods and technıques, communıcatıon. *Journal of Mustafa Kemal Unıversıty Socıal Scıences Instıtute*, 8, 487-506.

Başbuğ, G., & Ünsal, P. (2010). Opinions of academic staff about a performance evaluation system to be established: A survey conducted at a public university. *Journal of Istanbul University Psychology Studies,* 29(1), 1-24.

Bayık, A. (2001, 19-22 September). *What kind of a change in nursing, nursing education and roles of nursing educators in the twenty-first century?* I. International and National Nursing Education Congress*, Nevsehir,* Turkey.

Bayram, N. (2017). *Introduction to Structural Equation Modeling*. Ezgi Publication.

Bergan, S. & Damain, R. (2010). *Higher education for modern societies-competences and values.* Council of Europe Publishing.

Brechelmacher, A. et al. (2015). The rocky road to tenure – career paths in academia. In T. Fumasoli, G. Goastellec & B. M. Kehm (Eds). *Academic Workand Careers in Europe: Trends, Challenges, Perspectives* (ss. 13-40). Cham, *Springer International Publishing*.

Brown, R. (2018). Higher education and inequality. *Perspectives: Policy and Practice in Higher Education,* 22(2), 3743.

Büyüköztürk, Ş. (2006). *Data analysis for social sciences: statistics, research design SPSS applications and interpretation.* Pegem A Publishing.

Chan, R., Brown, G. & Ludlow, L. (2014, April). *What is the purpose of higher education? A comparison of instituonal and student perspectives on the goals and purposes of completing a bachelor's degree in the 21 st.centry.* American Education Research Association (AERA) Conferance.

Demir, R., & Acar, A. C. (2011, 26-28 May). *Performance-related remuneration: A study to determine the attitudes of academic staff working in public universities towards performance-related remuneration.* 19th National Management and Organization Congress Proceedings*, Çanakkale*, *Turkey.*

DeVellis, R.F. (2014). *Scale Development;Theory and applications*. Sage.

Djelic, M. (2008). Phd education-challenges and opportunities of europeanization. In G. Mazza, P. Quattrone, & A. Riccaboni (Eds*), European Universities in Transition: Issues, Models, and Cases.* Northampton: *Edward Elgar Publising*.

Doğramacı, İ. (2007). *Higher education management in Turkey and the world. Meteksan*.

Erdem, A.R. (2015). The critical element that differentiates higher education and university: Academic strategy. *In A.Aypay (Eds), Higher Education in Turkey: Space, Inside Scope and Policy (ss. 243-260). Pegem Academy Publishing.*

Ergün, M. (2001, 11-13 January). *Improving teaching effectiveness in universities*. National Symposium of Turkish National Education Organization and Administration in 2000, Ankara, Turkey.

Ergün, M. (2003). *Improving teaching activity at Afyon Kocatepe University*. XII. Educational Sciences Congress, Afyon, Turkey.

Esen, M., & Esen, D. (2015). Investigation of the attitudes of faculty members towards performance evaluation system. *Journal of Higher Education and Science*, 52-67. http://dx.doi.org/10.5961/jhes.2015.109

Eurydice Report (2010). *Focus on higher education in Europe 2010: The impact of the Bologna process*. http://www.ehea.info/media.ehea.info/file/2010.

Eurydice Report (2017). *Structural indicators for monitoring education an training systems in Europe.* https://eacea.ec.europa.eu/national-policies/eurydice

George, D. & Mallery, P. (2001). *SPSS for windows step by step: A simple guide and reference*. Needham Heights: Allyn & Bacon Publish

Helterbran, V.R. (2008). The ideal professor: Student perceptions of effective instructor practices, attitudes, and skills. *Education,* 129(1), 125-138. https://eric.ed.gov/?id=EJ816980

Jackson, M. (2006). 'Serving Time': the relationship of good and bad teaching. *Quality Assurance in Education,* 14(4), 385-97. https://doi.org/10.1108/09684880610703965

Kalaycı, N. (2009). Methods used in the process of evaluating the teaching performance of academicians in higher education institutions. *Educational Administration. Theory and Practice,* 15(60), 625-656. http://dergipark.org.tr/kuey/issue/10337/126671

Karadağ, N., Özdemir, S. (2017). The Views of Faculty Members and Phd Students on the Processes of Doctoral Education in Turkey. *Journal of Higher Education and Science,* 7(2), 267-281. http://dxdoi.org/10.5961/jhes.2017.206

Kashkan, G.V., & Egorova, M.S. (2015). Problems and outlooks of international integration of higher education. *International Education Studies,* 8(7), 250-255. http://dx.doi.org/10.5539/ies.v8n7p250

Marginson, S. (2016). High participation systems of higher education. *The Journal of Higher Education*, 87(2), 243-271. https://doi.org/10.1080/00221546.2016.11777401

Matas, C.P. (2012). Doctoral education and skills devalopment: An international perspertive. *Reviste de Docencia Universitaria,* 10(2), 163-168. http://redaberta.usc.es/redu

Özçakır Sümen, Ö., & Kesten, A. (2014). School of education students' expectations from their lecturers and their views on whether these are fulfilled. *Gaziantep University Journal of Social Sciences*, 13(1), 183-199. https://doi.org/10.21547/jss.256837

Özdamar K. (2016). Structural Equation Modeling for Scale and Test Development. *1st Edition. Eskisehir: Nisan Bookstore.*

Özdemir, E., & Üzel, D. (2010). Examining the opinions of elementary mathematics teacher candidates about the instructor characteristics. *Mehmet Akif Ersoy University Journal of Education Faculty,* 10(20), 122-152. http://dergipark.org.tr/maeuefd/issue/19393/205967

Philadelphia, PA.Davis D., Stullenbarger, E., Dearman C., & Kelley, C. A. (2005). Proposed nurse educator competencies: Development and validation of a model. *Nurs Outlook,* 53,206-211. https://doi.org/10.1016/j.outlook.2005.01.006

Sökmen, S. (2001). *Situation Assessment for Improvement of Education in Nursing Schools*. (Unpublished master's thesis) Istanbul University Institute of Health Sciences, Istanbul.

Tabachnick, B.G. & Fidell, L.S. (2001). *Using multivariate statistics. (4th Ed).* Needham Heights: Allyn & Bacon.

Tavşancıl, E. (2002). *Measurement of attitudes and data analysis with SPSS*. Nobel Publications. Ankara.

Telli Yamamoto, G. (2018). Thoughts on the higher education system in Turkey. *Journal of University Research,* 1(3), 132-138. https://doi.org/10.32329/uad.482681

Ulupınar, S. (1998, 14-16 May). *Qualities of Teachers According to Students and Teaching Staff.*

International Participation VI. National Nursing Congress. Ankara, Turkey.

United Nations Educational, Scientific and Cultural Organization. (1998). *World Declaration on Higher Education for The Twenty First Century: Vision and Action, 9 October.* www.unesco.org/education/.../declaration_eng.ht.

United Nations Educational, Scientific and Cultural Organization. (2009). *2009 World Higher Education Conference: New dynamics of higher education and research for social change and development*. Final declaration. *Paris.* http://webb.deu.edu.tr/bologna/diger_bildirgeler/yuksekogretim_konferansi_bildirgesi

Vatansever, K., & Durak, H.İ. (2007). How to teach educational development in medicine: A review of learning theories, basic concepts, practices and examples. *Medical Education World,* 24, 28-37. http://dergipark.org.tr/ted/issue/21310/228669

World Health Organization. (2016). Nurse educator core competencies. Printed by the WHO Document Production Services, Geneva, Switzerland. https://www.who.int/hrh/nursing_midwifery/nurse_educator

Wood, M., & Su, F. (2017). What makes an excellent lecturer? Academics' perspectives on the discourse of'teaching excellence' in highe education. *Teaching in Higher Education,* 22(4), 451-466. https://doi.org/10.1080/13562517.2017.1301911

Higher Education Academic Evaluation and Quality Improvement Commission. (2007). *Guidelines for academic evaluation and quality improvement in higher education institutions.* http://www.yodek.org.tr

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: January 29, 2021
Accepted: April 24, 2021
http://dergipark.org.tr/rep

e-ISSN: 2602-3733

June 2021◆5(1) ◆ 14-30

Research Article

Published: 06.30.2021

The Relationship between Resilience and Need for Social Approval in University Students

Mukadder Büyükeskil[1]

Ministry of Education

Zeliha Traş[2]

Necmettin Erbakan University

Şahin Kesici[3]

Necmettin Erbakan University

Abstract

The purpose of this study was to examine the relationship between resilience and need for social approval of university students. In the study, the relation of resilience with gender, age, perceived income level and romantic relationship status variables, and also, whether the need for social approval predicted resilience were examined. The research was carried out with the correlational survey model, which is one of the quantitative research methods. "The Need for Social Approval Scale", "The Resilience Scale-Short Form" and "The Risk Factors Identification List" were used in the study. The participants consist of a total of 408 people who have marked at least one risk factor. Descriptive statistics, independent sample t-test, Anova test, correlation and regression analysis technique were used in the analysis of the data. According to the findings, a moderate negative correlation was found between students' need for social approval and resilience. In addition, it was seen that while resilience differs significantly according to age and having a romantic relationship, resilience is predicted by the need for social approval.

Key Words

Need for social approval • Resilience • University students

[1] PhD Student, Education Faculty, Necmettin Erbakan University, Konya, Turkey. E-mail: mukadderbuyukeskil@gmail.com **ORCID:**0000-0001-6011-6302

[2] **Correspondance to:** Prof. Dr., Necmettin Erbakan University, Faculty of Ahmet Kelesoglu Education Konya, Turkey. E-mail: zztras@gmail.com **ORCID:** 0000-0003-2670-0868

[3] Prof. Dr., Necmettin Erbakan University, Faculty of Ahmet Kelesoglu Education Konya, Turkey, E-mail: sahinkesici@erbakan.edu.tr **ORCID:** 0000-0003-3823-5385

Citation: Büyükeskil, M., Traş, Z., & Kesici, Ş. (2021). The relationship between resilience and need for social approval in university students. *Research on Education and Psychology(REP)*, *5*(1), 14-30.

In the adventure of life, each individual has to struggle with many problems. Some individuals give up and yield to negative feelings after adversities they face, while others manage to feel good again by strongly hugging life. The positive psychologytrend, which has aroused increasing interest in current studies, focuses on positive experiences and positive individual characteristics as well as highlighting the importance of well-being and optimum functionality (Lee Duckworth et al., 2005). The issue of resilience is an important concept that is addressed within positive psychology.

Mastenet al., (1990) define the concept of resilience as the process, capacity, or outcome of a successful adaptation, although there are situations that challenge or threaten the individual. Tedeschi and Calhoun (2004) cited resilience as the ability to hold on to life and lead a meaningful life after being exposed to difficulties. Resilienceis also described as the ability to withstand any disruption and bounce back within a reasonable time (Aven, 2011). In another definition, resilience is considered as the process of effectively overcoming, re-adapting and managing the sources of stress or trauma of the individual, and it is stated that resilience is a facilitating factor for individuals to adapt and bounce back in the face of distressing situations (Windle, 2011).

In today's world, individuals are exposed to many difficulties such as crime and accidents, natural disasters, socially uncomfortable situations and financial problems. Resilience plays a key role in the process of adapting and overcoming adverse events and difficulties individuals face (Oshioet al., 2003). Definitions that explain the concept of resilience focus on three main contents: risk factors, protective factors and positive results (Işıket al., 2019). Resilience can be fully revealed when individuals face disturbances and difficulties. These difficulties are adversities and risks, including adaptation difficulties throughout life or internal and external negative life events related to mental disorders (Hu et al., 2015). Risk factors that will trigger difficulties in individual's family and community interaction may include genetic, biological, psychosocial and demographic conditions (Terzi, 2008). Supporting factorslike social milieu and family, especially in childhood and adolescence, are of great importance in the development of resilience (Karaırmak, 2007). There is a decrease in the resilience of individuals who are excluded by others (Traşet al., 2019a).

The need for social approval is an element about the individual’s attaching importance to the expectations and judgments of other people and actingfor harmony in their interactions with others (Karaşar&Öğülmüş, 2016a). Individuals, who feel the need for social approval, are those who are concerned about preventing others from disapproving them and act towards presenting themselves positively with the desire to create a positive impression (Jellison& Gentry, 1978). People in need of approval are very interested in what others think of themselves and avoid being perceived as socially unpleasant (Grams & Rogers, 1990).

In addition to the personality and attitude evaluations, cultural demands in the environment, in which individuals live, are also effective in differentiating the need for social approval. People with high social approval needs want to present themselves positively by acting in accordance with social demands and become sensitive to the expectations of others to be culturally approved (Strickland & Crowne, 1962). The attributions for social approval in individuals can give different results in relation to the attributions for self-esteem. In the perspective of Social Cognitive Theory, self-development is affected by social and environmental factors, and personal will is linked to environmental adaptation (Bandura, 2001). According to MacDonald et al. (2003), considering the interpersonal self-theories that include the concept of global self-esteem, high self-esteem includes more than one’s belief regarding s/he has positive characteristics. Interpersonal theories suggest that social feedback directed to the individual is very important in terms of self-esteem. It was pointed out that the self-esteem of the person can be attributed to the perceptions of admissibility towards other people, and self-assessments can vary depending on the individual's belief that a particular feature is important for social approval. Considering the cultural texture of our country, the need for social approval can be seen as an important factor in terms of interpersonal competence level, as behaviors towards rapport are prioritized in relationships with other individuals (Baytemiret al., 2017). Self-esteem of people seeking social approval is shaped by the state of praise, appreciation and approval offered by other people (Ak et al., 2020).

When the literature is examined, it is seen that many studies have been carried out in the national and foreign literature about resilience. When these studies are examined, it draws attention that there is anegative relationship between resilience and stress (Ong et al., 2006; Yağmur&Türkmen, 2017; Bitsikaet al., 2013) between resilience and depression (Moreira et al., 2015; Wermelinger Avila et al., 2017; Gitoet al., 2013), between resilience and post-traumatic stress disorder (Mealeret al., 2012; Sakarya&Güneş, 2013; Bibi et al., 2018); between resilience and anxiety (Hjemdalet al., 2011; Skroveet al., 2013; Carvalho et al., 2016); and there is apositive relationship between resilience and well-being (Sagone& De Caroli, 2014; Kirmaniet al., 2015; Çetinkaya&Bulut,2019); and between resilience and life satisfaction (Achour& Nor, 2014; Rani &Midha, 2014; Çeliket al., 2017).

Purpose of The Study

The dynamics that stimulate resilience is an interesting issue that is tried to be answered in current researches (Karaırmak&Siviş-Çetinkaya, 2011). Considering the information in the literature, no study explaining the relationship between resilience and the need for social approval has been found. The nature of the need for social approval and the resilience can be nurtured both by the individual's personality and the interaction with the environment and culture. While individuals with high social approval needs behave according to the expectations and demands of others (Karaşar&Öğülmüş, 2016a), resilient individuals can act more autonomously (Ernas, 2017). Considering this perspective, clarifying the relationship between resilience and the need for social approval is considered important in terms of filling the gap in the literature. The aim of this study is to examine the relationship between resilience and need for social approval of university students. In addition, the relationship between resilience and some variables will be examined.

In line with this purpose, the research aimed to answer the following basic questions:

1. Does the resilienceof university students differ significantly according to gender?

2. Does the resilienceof university students differ significantly according to age?

3. Does the resilience of university students differ significantly according to perceived income level?

4. Does the resilience of university students differ significantly according to their romantic relationship status?

5. Is there a significant relationship between resilience and need for social approval in university students?

6. Does the need for social approval of university students significantly predict the resilience?

Method

Research Design

This research was carried out according to the relational screening model. In the screening model, it is aimed to depict a situation that happened in the past or is still ongoing today, without changing it. The person, object or event that is the subject of the research is tried to be described in its own conditions and as it is (Karasar, 2015).

Study Group

The participants of this research consist of 408 students who continue their education life in a public university in Konya. Out of 408 people in total, 72.1% of the students were women, 27.9% were men; 61.1% were between the ages of 18-21, and 38.9% were between the ages of 22-30. 3.2% of the students were in preparatory class, 29.4% were 1st grade, 6.1% were 2nd grade, 18.6% were 3rd grade, 33.1% were 4th grade, and % 9.6 of them were graduates.

Research Instruments and Processes

The research data was collected by using Personal Information Form, The Need for Social Approval Scale developed by Karaşar&Öğülmüş (2016a), The Resilience Scale-Short Form developed by Işıket al. (2019) and The Risk Factors Identification List developed by Terzi (2008).

The Need for Social Approval Scale:

The Need for Social Approval Scale developed by Karaşar&Öğülmüş (2016a) was used in the study. This 5-point Likert type scale consists of 25 items and three sub-dimensions. The sub-dimensions of the scale are called sensitivity to others' judgments, leaving a positive impression and social withdrawal, and the need for social approval increases as the score obtained from the scale increases. Internal consistency coefficients for the sub-dimensions of the scale vary between .80 and .83. The pretest-posttest reliability and internal consistency coefficient of the scale was .90. It was stated that The Need for Social Approval Scale has a good structural validity and the Cronbach Alpha reliability coefficient was .91. The Cronbach Alpha reliability coefficient calculated for this study was found as .93.

The Resilience Scale-Short Form:

The Resilience Scale (RS) - Short Form was developed by Işıket al. (2019), by recruiting the items in the long version adapted to the Turkish culture. For this purpose, exploratory factor analysis based on varimax rotation and principal components analysis was performed for the data collected from 211 people. As a result of the exploratory factor analysis, a 10-item one-dimensional scale with an item factor load varying between .65 and .85 was obtained. Regarding the criterion validity of the scale, the researchers determined a positive relationship between the total scores of the scale and positive emotion scores, and a negative and significant relationship between the negative emotion and depression scores. In the second stage, the data collected from 346 people were analyzed with Confirmatory Factor Analysis and the fit indexes of the scale were found to be in the range ofacceptable values. While the internal consistency coefficient of the scale, which contains a single-factor structure, was Crα = .91, the correlation coefficient was .83 as a result of the test repeat reliability. The Cronbach Alpha reliability coefficient calculated for this study was found as .89.

The Risk Factors Identification List:

Resilience is considered as an effective coping method involving the effort to maintain and restore internal and external balance through human activities, including thought and action under a significant threat (Lutharet al., 2000). In order for the resilience to be activated, the individual needs to struggle with certain difficulties. In order to examine whether this activation has risk factors, The Risk Factors Identification List consisting of 30 items was designed by Terzi (2008).

Personal Information Form:

In the Personal Information Form created by the researchers, there are questions in order to obtain information about the gender, age, perceived income level and romantic relationship status of university students.

Data Analysis

The data were analyzed using the SPSS (20) package program.As the first process, data collection tools were distributed to 459 university students. The responses of 51 individuals who did not make any markings on any factor in the Risk Factor Determination List (Terzi, 2008) were removed from the data set. The participants who were in the study group and included in the analysis consisted of a total of 408 people, aged between 18 and 30, as 294 (72.1%) women and 114 (27.9%) men.

Outlier extraction was done by examining Mahalanobis Distance, Cook's Distance, and Leverage values. Mahalanobis Distance, Cook's Distance, and Leverage values are examined to extract outliers (Seçer, 2015). After extracting the outliers, skewness and kurtosis values were examined to determine whether the data set has a normal distribution. The skewness and kurtosis coefficients can be assumed to meet the normality of the distribution if they are between the scale of -1 and +1 (Hair et al., 2013). The skewness and kurtosis values regarding the data distribution are presented in Table 1.

Table 1

Skewness and Kurtosis Values of Variables

	Skewness	**Kurtosis**
The Resilience Scale	-.570	.273
The Need for Social Approval Scale	-.151	-.269

Findings

Table 2

Results of t-test Regarding the Comparison of Resilienceaccording to Gender

Gender	n	$\bar{X}$	Sd	t	p	η^2
Women	294	52.43	9.55	-1.712	.088	.18
Men	114	54.23	9.40			

* *p* <.05

Whether university students' resilience differs according to gender was analyzed with independent samples t-test, and the results are given in Table 2. It was revealed that resilience of the students did not differ significantly according to gender (t (409) = -1.172, p> .05).

Table 3

Results of t-test Regarding the Comparison of ResilienceAccording to Age

Age	n	$\bar{X}$	Sd	t	p	η^2
18-21	249	52.10	9.41	-2.228	.026	.22
22 and above	159	54.25	9.61			

* *p*<.05

Whether resilience differs significantly according to age was analyzed with independent samples t-test, and the results are given in Table 3. It was revealed that the students 'average scores of resilience differed significantly according to age (t (406) = -2,228, p <.05), and students aged 22 and above had higher resilience.

Table 4

Average and Standard Deviation Values of Resilience According to Perceived Income Level

Perceived Income Level	N	$\bar{X}$	Sd
Low	68	5.18	.97
Medium	313	5.30	.93
High	27	5.39	1.12

* *p*<.05

Average and standard deviation values of total scores of resilience according to perceived income level of university students are shown in Table 4. Whether there is a difference between the averages in terms of perceived income variable was examined by ANOVA test and the results are given in Table 5.

Table 5

Anova Results on Comparison of Resilience According to Perceived Income Level

	Sum of Squares	sd	Mean of Squares	F	p	η^2
Between-groups	1.08	2	.542	.594	.55	.003
Within-groups	369.32	405	.912			
Total	370.40	407				

* *p*<.05

In the analysis conducted on whether the participants' resilience levels show a significant difference in terms of perceived income level, it was found that the resilience did not differ significantly according to perceived income level (F (2, 405) =. 594, p> 0.05).

Table 6

T-test Results on Comparison of ResilienceAccording to Romantic Relationship Status

Romantic Relationship Status	n	$\bar{X}$	Sd	t	p	η^2
Yes, I have a relationship	145	55.47	8.97	4.060	.000	.42
No, I don't have a relationship	263	51.54	9.57			

* *p*<.05

Whether there is a difference between the resilience of university students according to the romantic relationship status was analyzed with independent samples t-test, and the results are given in Table 6. It is seen that resilience differs according to romantic relationship status (t (406) = 4.060, p <.05, η2 = .02), and that students with romantic relationship have higher resilience.

Table 7

Correlations between Resilience and Need for Social Approval

	Need for Social Approval
1. Resilience	-.316**

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

The results of Pearson Product-Moment Correlation regarding whether there is a significant relationship between the resilience and the need for social approval of the university students are presented in Table 7. When we look at Table 7, it is seen that there is a moderate negative significant relationship (r = -.316, p <.01) between resilience and need for social approval.

Table 8

Regression Analysis Results Regarding the Prediction of Resilience by Need for Social Approval

Variables	B	SE	β	t	p
Coefficient	64.964	1.846		35.188	.000
Need for Social Approval	-.167	.025	-.316	-6.713	

R = .31, R^2 = .10, F (1.406) = 45.068, p <.001

* *p*<.05, ** *p*<.001

When Table 8 is examined, it is seen that the need for social approval predicts resilience significantly (R = .31, R2 = .10, F = 45.068, p <.001) and explains 10% of the total variance related to resilience. When standardized coefficient β and t values are examined, it can be said that the need for social approval is a significant predictor of resilience.

Discussion

In the study, it was seen that there was no significant difference between the students' resilience and gender. When the studies on gender and resilience are examined, it is seen that there are publications supporting this finding (Craparo et al., 2018; Rew et al., 2001), but there are also publications that show differentiation by gender (Boardman et al., 2008; Masood et al., 2016; Stratta et al., 2013). In the study where Boardman et al. (2008)examine the contribution of genetic structure and social environment to the resilience of twin individuals, it is stated that the resilience is equally inherited in men and women, but it can differ by gender according to social surroundings mastery and self-acceptance. While there is no hereditary difference in resilience in both women and men in terms of genetics, the advantageous effect in the social environment has been observed to have a higher contribution to resilience in men than women. Masood et al. (2016) stated in their study that women have a lower level of resilience than men and women experience more psychological unrest. Stratta et al. (2013) likewise stated that there is a differentiation in favor of men among women and men who experience earthquake disaster, and that men can operate a protective resilience mechanism due to the fact that they have the ability to cope with problem-solving without an emotional focus. The outliers in the literature on the level of gender and resilience may be due to cultural factors and the differentiation of parental attitudes that individuals encounter while being raised. In the study conducted by Akça (2012) on young adults, resilience does not differ by gender, whereas the high resilience of adults who express the perceived mother's attitude in a way that supports autonomy can be given as an example to abovementioned situation.

Research findings revealed that students aged 22 and above were significantly higher in resilience than students aged 18-21. When the studies in the literature are analyzed, it is seen that there are significant differences in some studies in terms of the effect of age variable on resilience, and in others, there is no difference (Gooding et al., 2012; Diehl & Hay, 2010; Windle et al., 2008; Ong et al., 2009; McCoy, 2001). According to the results of his research, McCoy (2001) revealed that individuals with higher resilience are older than those with lower levels. He stated that the fact that older individuals have more life experiences compared to younger individuals, encounter more stressors and successfully solve the negative events that happened in the past can bring them to an advantageous position in obtaining resilience. Ong et al. (2009) think that individual differences in the level of resilience can be an important way of understanding the stress of daily life in advanced adulthood, and thissupports the findings of our research. Gooding et al. (2012), on the other hand, explain that adults with advanced age are more resilient in terms of emotion regulation and problem-solving skills, and that depression, which also includes emotional dysfunction in young people, has negative reflections on resilience, and this can contribute to understanding of differentiations in age dynamics. That theresilience increases as the age progresses can be explained by the fact that individuals can easily deal with negativities as they have experiences in the life process (Aydın &Egemberdiyeva, 2018). In this study, the resilience of the individuals aged 22 and above can be explained by the fact that the resilience increases as the age increases.

There are overlapping and contradictory studies in the literature regarding the finding that there is no significant difference between resilienceand perceived income, which is another variable in the study (Traş et al., 2019b; Sarıkaya, 2019; Wells, 2012; Perna et al., 2012; Hardy et al., 2004; Todd &Worell, 2000). In the study of Sarıkaya (2019) with university students, there was no difference between resilience and income status. In the study of Wells (2012), while individuals with low incomes have higher resilience, on the contrary, Hardy et al. (2004) stated that individuals with an annual income of $ 25,000 or more have higher resilience than those with low income. Perna et al. (2012) studied resilience and health behavior on older individuals with low and high socio-economic income. In this study, it was revealed that, without the effect of socio-economic level on resilience, resilient individuals have high fruit and vegetable consumption and exhibit moderate physical activity. Todd &Worell (2000) stated that there are individuals who can live positive and productive lives despite the low income and intensive working pace in the study in which they examine the resilience of poor women. In this study, it was revealed that the resilience of poor individuals was affected by supportive or weak social ties, and by their social comparison and low or high self-efficacy levels. Although people with low income struggle with troubles for many years, they can exhibit a more resilient attitude towards life difficulties. This can be explained by the fact that resilience increases with supportive social environment interaction and is related to personality traits.

There was a significant difference between the resilience and romantic relationshipsof university students. There are many studies in the literature that support this finding. In their study with teacher candidates, Traş et al. (2019b) stated that the resilience significantly changes with the presence of someone special. Moore &Leung (2002) reported that secure attachment to a partner in young adults supports subjective well-being, and that individuals who are securely attached can provide successful social support by establishing more qualified relationships in a romantic sense. Öztürk (2019) stated that individuals with romantic relationships have higher levels of communication and establishing relationships, which are the sub-dimensions of cognitive emotion regulation, compared to those who do not have a relationship. In the study carried out by Islam (2016), there were positive relationships between resilience and fear of romantic relationships, and a positive relationship between satisfaction, self-confidence, assertiveness and internal control. Eryılmaz&Ercan (2010) reported that there is a positive relationship between initiating a romantic intimacy and problem-oriented coping and seeking social support. In the study conducted by Yakıcı&Traş (2018), it was observed that the resilience decreases as the loneliness increases in individuals. The comforting effect of the need to love and belong to someone in a romantic relationship, the advantage of having quality communication and social support, may also have contributed positively to resilience by functioning as a protective factor. The positive feedback and compliments that the partners point towards each other in a romantic relationship affect self-esteem (Marigold et al., 2007). As self-esteem increases in individuals, an increase in resilience is observed (Traş& Aydın, 2019).

According to the research findings, there was a negative relationship between the need for social approval and resilience. When the literature is examined, it is seen that there is no study that directly addresses the need for social approval and resilience. Alternatively, parallel studies were conducted on the need for approval, the schema of approval seeking which takes place in other-directedness sub-dimension,which is one of the early maladaptive schemas, the fear of negative evaluation, and social desirability. Craparo et al. (2018) reported that in their study on coping, attachment styles, resilience and alexithymia, there was a positive relationship between resilience and self-confidence, and a negative one between resilience and need for approval. In their study, Khadem et al. (2017) stated that resilience had a moderate effect on the relationship between anxiety and depression and the other-directedness schema domain. In his research with adults, Tanyeri (2016) stated that there were negative relationships between the other-directedness sub-dimension of early maladaptive schemas and resilience. In Alagöz (2019)'s study on need for social approval of individuality adjustment, focus control and expression of emotions, reverse relations were observed between autonomous individuality and sensitivity to other's judgments, social withdrawal, and leaving a positive impression. Individuals with high social approval needs are anxious to be perceived as socially incompatible and can avoid revealing their identity. These individuals, who are attracted to approval, can develop an addictive personality pattern by suppressing their subjective feelings and thoughts. Individuals who have high resilience can display their autonomous identity by activating their own inner powers if they are not approved. Ernas (2017)'sresearch, which reveals positive relationships between autonomy and resilience also supports this explanation. In the study of Traş et al. (2013) on university students, the positive relationship between self-esteem and social self-efficacy and resilience strengthens this finding. Individuals, who feel the need for social approval intensely, may not be able to balance emotionally in the face of negative evaluations because they live as focused on sociallikability. As a matter of fact, as the need for social approval increases, mental problems such as interpersonal sensitivity, depression, anxiety, phobic anxiety appear (Karaşar & Öğülmüş, 2016b).Leipold&Greve (2009) stated that resilience creates a conceptual bridge between coping with difficulties and development, and stated that according to their resilience level, individuals avoid the conditions with negative consequences or recover by coping. It is thought that as anxiety and stress management will also be strong in individuals with high resilience, they will be able to cope more easily with the troubled emotional state of being unable to get social approval.

Results and Recommendations:

New research can be conducted on gender roles and resilience to clarify the biopsychosocial basis of resilience. In addition, studies revealing resilience, interpersonal competence and psychological symptoms of individuals with different socio-economic levels can be carried out. Relationships between the need for social approval and resilience can be examined with different populations in the country and abroad and cultural differences can be revealed. Training programs that increase resilience by reducing the need for social approval can contribute to subjective well-being of individuals.

Ethic

All procedures in this study involving human participants were carried out in accordance with the ethical standards of Necmettin Erbakan University Research Ethics Committee with file number 2021/06 and the 1975 Declaration of Helsinki.

Author Contributions

This article was written with the joint contributions of three authors.

Conflict of Interest

The authors declare that they have no conflict of interest.

Funding

No scholarships or payments have been received from any institution for this article.

References

Achour, M., & Nor, M. R. M. (2014). The effects of social support and resilience on life satisfaction of secondary school students. *Journal of academic and applied studies*, 4(1), 12-20.

Ak, M., Kırpınar, İ., Atmaca, M., Erkan Yüce, A., Güler, Ö., Kesici, Ş., & Akkişi Kumsar, N. (2020). *Klinik Uygulamada Bilişsel Davranışçı Terapi [Cognitive Behavioral Therapy in Clinical Practice]*. Nobel Publishing.

Akça, Z. K. (2012). *Genç yetişkinlikte algılanan anne-baba tutumlarının, kendini toparlama gücü ve benlik saygısı arasındaki ilişki [The relationship between perceived parental attitute and psychological resilience and self esteem in young adulthood]* (Unpublished master thesis). Maltepe University, İstanbul, Turkey.

Alagöz, G. (2019). *Benlik Kurgusunun Sosyal Onay İhtiyacı, Kontrol Odağı ve Duygularını İfade Edebilme İle İlişkisi* [Individuality regulation social approval needs, ıtsrelationship with focus of control and ability toexpress feelings] (Unpublished master thesis). İstanbul Arel University, İstanbul, Turkey.

Aven, T. (2011). On some recent definitions and analysis frameworks for risk, vulnerability, and resilience. *Risk Analysis: An International Journal*, 31(4), 515-522. https://doi.org/10.1111/j.1539-6924.2010.01528.x

Aydın, M., & Emberdiyeva, A. (2018). Üniversite öğrencilerinin psikolojik sağlamlık düzeylerinin incelenmesi [An Investigation of University Students' Resilience Levels]. *Turkey Education Journal*, 3(1), 37-53.

Bandura, A. (2001). Social cognitive theory of mass communication. *Media psychology*, 3(3), 265-299. https://doi.org/10.1207/S1532785XMEP0303_03

Baytemir, K., Karaşar, B. & Öğülmüş, S. (2017). Ebeveyne Bağlanma ve Sosyal Onay İhtiyacının Kişilerarası Yeterliği Yordayıcılığı [The Extent to Which Attachment to Parents and the Need for Social Approval Predict Interpersonal Competence]. *Mersin University Journal of the Faculty of Education*, 13(3), 949-960. https://doi.org/10.17860/mersinefd.305546

Bibi, A., Kalim, S. & Khalid, M. A. (2018). Post-traumatic stress disorder and resilience among adult burn patients in Pakistan: a cross-sectional study. *Burns and trauma*, 6(1), 1-6.

Bitsika, V., Sharpley, C. F. & Bell, R. (2013). The buffering effect of resilience upon stress, anxiety and depression in parents of a child with an autism spectrum disorder. *Journal of Developmental and Physical Disabilities*, 25(5), 533-543. https://doi.org/10.1007/s10882-013-9333-5

Boardman, J. D., Blalock, C. L., & Button, T. M. (2008). Sex differences in the heritability of resilience. *Twin Research and Human Genetics*, 11(1), 12-27. https://doi.org/10.1375/twin.11.1.12

Carvalho, I. G., Bertolli, E. D. S., Paiva, L., Rossi, L. A., Dantas, R. A. S. & Pompeo, D. A. (2016). Anxiety, depression, resilience and self-esteem in individuals with cardiovascular diseases. *Revista latino-americana de enfermagem*, 24, 1-10. https://doi.org/10.1590/1518-8345.1405.2836

Craparo, G., Magnano, P., Zapparrata, M. V., Gori, A., Costanzo, G., Pace, U., & Pellerone, M. (2018). Coping, attachment style and resilience: the mediating role of alexithymia. *Mediterranean Journal of Clinical Psychology*, 6(1), 1-30.

Çelik, M., Sanberk, İ. & Deveci, F. (2017). Öğretmen adaylarının yaşam doyumlarının yordayıcısı olarak psikolojik dayanıklılık ve umutsuzluk [Psychological Resilience and Hopelessness as a Predictor of Life Satisfaction of Teacher Candidates]. *Elementary Education Online*, 16(2), 654-662.

Çetinkaya, A. & Bulut, S. S. (2019). Lise Öğrencilerinde Kendini Toparlama Gücü Düzeyleri ve Öznel İyi Oluşu Artırma Stratejilerinin İncelenmesi [Investigation Of The Resilience Levels And The Strategies For Increasing Subjective Well Being Of High School Students]. *Turkish Psychological Counseling and Guidance Journal*, 9(55), 1053-1084.

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(5), 1132-1146. https://psycnet.apa.org/doi/10.1037/a0019937

Ernas, Ş. (2017). *Özerklik ve psikolojik dayanıklılık arasındaki ilişkinin incelenmesi* [An investigation of the relationship between authenticity and psychological resilience in terms of demografhic variables] (Unpublished master thesis). Istanbul Gelişim University, Istanbul, Turkey.

Eryılmaz, A. & Ercan, L. (2010). Beliren yetişkinlikte romantik yakınlığı başlatma ve başa çıkma [Initiating romantic intimacy and coping at emerging adulthood]. *Journal of Uludağ University Faculty of Education*, 23(2), 381-397.

Gito, M., Ihara, H. & Ogata, H. (2013). The relationship of resilience, hardiness, depression and burnout among Japanese psychiatric hospital nurses. *Journal of Nursing Education and Practice*, 3(11), 12-18.

Gooding, P. A., Hurst, A., Johnson, J. & Tarrier, N. (2012). Psychological resilience in young and older adults. *International journal of geriatric psychiatry*, 27(3), 262-270. https://doi.org/10.1002/gps.2712

Grams, W. C. & Rogers, R. W. (1990). Power and personality: Effects of Machiavellianism, need for approval, and motivation on use of influence tactics. *The Journal of General Psychology*, 117(1), 71-82. https://doi.org/10.1080/00221309.1990.9917774

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (2013). Multivariate Data Analysis: Pearson Education Limited.

Hardy, S. E., Concato, J. & Gill, T. M. (2004). Resilience of community-dwelling older persons. *Journal of the American Geriatrics society*, 52(2), 257-262. https://doi.org/10.1111/j.1532-5415.2004.52065.x

Hjemdal, O., Vogel, P. A., Solem, S., Hagen, K. & Stiles, T. C. (2011). The relationship between resilience and levels of anxiety, depression, and obsessive–compulsive symptoms in adolescents. *Clinical psychology and psychotherapy*, 18(4), 314-321. https://doi.org/10.1002/cpp.719

Hu, T., Zhang, D. & Wang, J. (2015). A meta-analysis of the trait resilience and mental health. *Personality and Individual Differences*, 76, 18-27. https://doi.org/10.1016/j.paid.2014.11.039

Işık, Ş., Özünlü, M. B. & Üzbe, A. N. (2019). Kendini Toparlama Gücü Ölçeği-Kısa Formu (KTGÖ-KF): Geçerlik ve Güvenirlik Çalışması [The resilience scale (RS)–short form: validity and reliability studies]. *Turkish Studies*, 14(1), 103-119.

İslam, E. (2016). *Romantik ilişkide kendilik değerlendirmesi ile algılanan ebeveyn kabul-red düzeyi arasındaki ilişki ve kendini toparlama gücünün aracılık rolü* [The relationship between parent acceptance rejection and self- assessment in romantic relationship: mediator role of self-resilience] (Unpublished master thesis). Maltepe University, İstanbul, Turkey.

Jellison, J. M. & Gentry, K. W. (1978). A self-presentation interpretation of the seeking of social approval. *Personality and Social Psychology Bulletin*, 4(2), 227-230. https://doi.org/10.1177%2F014616727800400210

Karaırmak, Ö. (2007). *Investıgatıon Of Personal Qualıtıes Contrıbutıng To Psyhologıcal Resılıence Among Earthquake Survıvors: A Model Testıng Study* (Unpublished Master's thesis). Mıddle East Technıcal Unıversıty The Department Of Educatıonal Scıences, Ankara, Turkey.

Karaırmak, Ö. & Çetinkaya, R. S. (2011). The effect of self-esteem and locus of control on resilience: The mediating role of affects. *Turkish Psychological Counseling and Guidance Journal*, 4(35), 30-41.

Karasar, N. (2015). *Bilimsel araştırma yöntemi: kavramlar-ilkeler-teknikler*[Scientific research method: concepts-principles-techniques]. Nobel Publishing.

Karaşar, B. & Öğülmüş, S. (2016a). Sosyal Onay İhtiyacı Ölçeği: Geçerlik ve Güvenirlik Analizi.[Need For Social Approval Scale: The Validity and Reliability]. *Ege Journal of Education*, 17(1), 84-104. https://doi.org/10.12984/eed.38607

Karaşar, B. & Öğülmüş, S. (2016b). Üniversite öğrencilerinde sosyal onay ihtiyacı ve psikolojik belirtilerin çeşitli değişkenlere göre incelenmesi.[Examining The Need For Social Approval and Psychological Semptoms in University Students In Terms Of Different Variables]. *Sakarya University Journal of Education Faculty*, (32), 97-121.

Khadem, H., Motevalli Haghi, S. A., Ranjbari, T. & Mohammadi, A. (2017). The moderating role of resilience in the relationship between early maladaptive schemas and anxiety and depression symptoms among firefighters. *Practice in Clinical Psychology*, 5(2), 133-140.

Kirmani, M. N., Sharma, P., Anas, M. & Sanam, R. (2015). Hope, resilience and subjective well-being among college going adolescent girls. *International Journal of Humanities and Social Science Studies*, 2(1), 262-270.

Lee Duckworth, A., Steen, T. A. & Seligman, M. E. (2005). Positive psychology in clinical practice. *Annual Review Clinical Psychology*, 1, 629-651. https://doi.org/10.1146/annurev.clinpsy.1.102803.144154

Leipold, B. & Greve, W. (2009). Resilience: A conceptual bridge between coping and development. *European Psychologist*, 14(1), 40-50. https://doi.org/10.1027/1016-9040.14.1.40

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. https://doi.org/10.1111/1467-8624.00164

MacDonald, G., Saltzman, J. L. & Leary, M. R. (2003). Social approval and trait self-esteem. *Journal of research in personality*, 37(2), 23-40. https://doi.org/10.1016/S0092-6566(02)00531-7

Marigold, D. C., Holmes, J. G. & Ross, M. (2007). More than words: Reframing compliments from romantic partners fosters security in low self-esteem individuals. *Journal of personality and social psychology*, 92(2), 232-248. https://psycnet.apa.org/doi/10.1037/0022-3514.92.2.232

Masood, A., Masud, Y. & Mazahir, S. (2016). Gender differences in resilience and psychological distress of patients with burns. *Burns*, 42(2), 300-306. https://doi.org/10.1016/j.burns.2015.10.006

Masten, A. S., Best, K. M. & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and psychopathology*, 2(4), 425-444. https://doi.org/10.1017/S0954579400005812

McCoy, P. K. (2001). *Psychological Hardiness and Biochemical Markers of Acute Stress* (Doctoral dissertation). University of North Texas.

Mealer, M., Jones, J. & Moss, M. (2012). A qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses. *Intensive care medicine*, 38(9), 1445-1451. https://doi.org/10.1007/s00134-012-2600-6

Moore, S. & Leung, C. (2002). Young people's romantic attachment styles and their associations with well-being. *Journal of adolescence*, 25(2), 243-255. https://doi.org/10.1006/jado.2002.0464

Moreira, J. M., Soares, C. M. B. M., Teixeira, A. L., e Silva, A. C. S. & Kummer, A. M. (2015). Anxiety, depression, resilience and quality of life in children and adolescents with pre-dialysis chronic kidney disease. *Pediatric nephrology*, 30(12), 2153-2162. https://doi.org/10.1007/s00467-015-3159-6

Ong, A. D., Bergeman, C. S. & Boker, S. M. (2009). Resilience comes of age: Defining features in later adulthood. *Journal of personality*, 77(6), 1777-1804. https://doi.org/10.1111/j.1467-6494.2009.00600.x

Ong, A. D., Bergeman, C. S., Bisconti, T. L. & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of personality and social psychology*, 91(4), 730-749. https://psycnet.apa.org/doi/10.1037/0022-3514.91.4.730

Oshio, A., Kaneko, H., Nagamine, S. & Nakaya, M. (2003). Construct validity of the adolescent resilience scale. *Psychological reports*, 93(3_suppl), 1217-1222. https://doi.org/10.2466%2Fpr0.2003.93.3f.1217

Öztürk, H. (2019). *Üniversite öğrencilerinde duygu düzenleme stratejileri ile psikolojik sağlamlık arasındaki ilişkinin incelenmesi*[Investigate the relationship between the emotion regulation strategies and the psychologic resilience levels in undergraduate students] (Unpublished master thesis). Hasan Kalyoncu University, Gaziantep, Turkey.

Perna, L., Mielck, A., Lacruz, M. E., Emeny, R. T., Holle, R., Breitfelder, A. & Ladwig, K. H. (2012). Socioeconomic position, resilience, and health behaviour among elderly people. *International journal of public health*, 57(2), 341-349. https://doi.org/10.1007/s00038-011-0294-0

Rani, R. & Midha, P. (2014). Does resilience enhance life satisfaction among teenagers. *Journal of Humanities and Social Science*, 19(6), 16-19.

Rew, L., Taylor-Seehafer, M., Thomas, N. Y. & Yockey, R. D. (2001). Correlates of resilience in homeless adolescents. *Journal of nursing scholarship*, 33(1), 33-40. https://doi.org/10.1111/j.1547-5069.2001.00033.x

Sagone, E. & De Caroli, M. E. (2014). Relationships between psychological well-being and resilience in middle and late adolescents. *Procedia-Social and Behavioral Sciences*, 141, 881-887. https://doi.org/10.1016/j.sbspro.2014.05.154

Sakarya, D. & Güneş, C. (2013). Van depremi sonrasında travma sonrası stres bozukluğu belirtilerinin psikolojik dayanıklılık ile ilişkisi. [The assocıatıon between symptoms of posttraumatıc stress dısorder and psychologıcal resılıence ın survıvors of van earthquake]. *Journal of crisis*, 21(1), 25-32. https://doi.org/10.1501/Kriz_0000000335

Sarıkaya, B. (2019). *Üniversite Öğrencilerinin Ebeveynleşme Yaşantıları İle Psikolojik Dayanıklılık Düzeyleri Arasındaki İlişki.[The relationship between parentification and psychological resilience levels of university students.* (Unpublished master thesis). Erzincan Binali Yıldırım University, Erzincan, Turkey.

Seçer, İ. (2015). *SPSS ve LISREL ile Pratik Veri Analizi Analiz ve Raporlaştırma* [Practical data analysis analysis and reporting with SPSS and LISREL]. Anı Publishing.

Skrove, M., Romundstad, P. & Indredavik, M. S. (2013). Resilience, lifestyle and symptoms of anxiety and depression in adolescence: the Young-HUNT study. *Social psychiatry and psychiatric epidemiology*, 48(3), 407-416. https://doi.org/10.1007/s00127-012-0561-2

Stratta, P., Capanna, C., Patriarca, S., de Cataldo, S., Bonanni, R. L., Riccardi, I. & Rossi, A. (2013). Resilience in adolescence: Gender differences two years after the earthquake of L'Aquila. *Personality and Individual Differences*, 54(3), 327-331. https://doi.org/10.1016/j.paid.2012.09.016

Strickland, B. R. & Crowne, D. P. (1962). Conformity under conditions of simulated group pressure as a function of the need for social approval. *The Journal of Social Psychology*, 58(1), 171-181. https://doi.org/10.1080/00224545.1962.9712366

Tanyeri, E. (2016). *23 Yaş ve Üzeri Heteroseksüel ve Homoseksüel Bireylerin Erken Dönem Uyumsuz Şemalarının İlişkilerde Yükleme Tarzları ve Psikolojik sağlamlık Üzerine Etkisi* [Effects of early maladaptive schemas of homosexual and heterosexual individuals on attributions in relations and psychological resiliencies at ages 23 and older] (Unpublished master thesis). Beykent University, İstanbul, Turkey.

Tedeschi, R.G. & Calhoun, L.G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1–18. https://doi.org/10.1207/s15327965pli1501_01

Terzi, Ş. (2008). Üniversite öğrencilerinde kendini toparlama gücü'nün içsel koruyucu faktörlerle ilişkisi. [The relatıonshıps between resılıence and ınternal protectıve factors ın unıversıty students]. *Hacettepe University Journal of Education Faculty*, 35(35), 297-306.

Todd, J. L. & Worell, J. (2000). Resilience in low-income, employed, African American women. *Psychology of Women Quarterly*, 24(2), 119-128. https://doi.org/10.1111/j.1471-6402.2000.tb00192.x

Traş, Z. & Aydın, E. (2019). Üniversite Öğrencilerinde Benlik Saygısı ile Kendini Toparlama Gücü Arasındaki İlişkinin İncelenmesi. [Examınıng the relatıon between unıversıty students' self-esteem and resılıence]. *Necmettin Erbakan UniversityEreğli Faculty of Education Journal*, 1(2), 71-78.

Tras, Z., Arslan, C. & Hamarta, E. (2013). An Examınatıon Of Resılıence In Unıversıty Students In Terms Of Self-Esteem And Socıal Self-Effıcacy. *International Journal of Academic Research*, 5(3), 323-328.

Traş, Z., Öztemel, K. & Kağnıcı, E. (2019a). A Review on University Students' Resilience and Levels of Social Exclusion and Forgiveness. *International Education Studies*, 12(10), 50-59.

Traş, Z., Öztemel, K. & Kağnıcı, E. (2019b). Öğretmen Adaylarında Kendini Toparlama Gücünün Çeşitli Değişkenlere Göre İncelenmesi [Investıgatıon of resılıence accordıng to the varıous varıablesof teacher candıdates]. *Necmettin Erbakan University Ereğli Faculty of Education Journal,1*(1), 29-41.

Wells, M. (2012). Resilience in older adults living in rural, suburban, and urban areas. *Online Journal of Rural Nursing and Health Care*, 10(2), 45-54. https://doi.org/10.14574/ojrnhc.v10i2.55

Wermelinger Avila, M. P., Lucchetti, A. L. G. & Lucchetti, G. (2017). Association between depression and resilience in older adults: a systematic review and meta-analysis. *International journal of geriatric psychiatry*, 32(3), 237-246. https://doi.org/10.1002/gps.4619

Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in clinical gerontology*, 21(2), 152-169.

Windle, G., Markland, D. A. & Woods, R. T. (2008). Examination of a theoretical model of psychological resilience in older age. *Aging and Mental Health*, 12(3), 285-292. https://doi.org/10.1080/13607860802120763

Yağmur, T. & Türkmen, S. N. (2017). Ruhsal Hastalığı Olan Hastalara Bakım Veren Aile Üyelerinde Algılanan Stres ve Psikolojik Dayanıklılık [Family caring for mentally ill perceived stress and resilience in members]. *Celal Bayar University Journal of Instituteof Health Science*, 4(1), 542-548.

Yakıcı, E. & Traş, Z. (2018). Life satisfaction and loneliness as predictive variables in psychological resilience levels of emerging adults. *Research on Education and Psychology*, 2(2), 176-184

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: March 24, 2021
Accepted: April 30, 2021
http://dergipark.org.tr/rep

e-ISSN: 2602-3733

June 2021 ◆ 5(1) ◆ 31-40

Research Article

Published: 06.30.2021

The Role of Academic Stress and Religiosity on Academic Dishonesty

Herdian Herdian[1]
Universitas Muhammadiyah Purwokerto

Itsna Nurrahma Mildaeni[2]
Universitas Muhammadiyah Purwokerto

Fatin Rohmah Wahidah Nur[3]
Universitas Muhammadiyah Purwokerto

Abstract

Academic dishonesty is still an interesting issue in universities: especially many assignments and the weak level of religiosity among students as part of the academic campus. This study aimed to examine the effect of academic stress and religiosity on academic dishonesty among students at private Islamic universities in Indonesia. As many as 277 students participated in this study. Data collection tools use The Academic Stress Inventory, The Centrality of Religiosity Scale (CRS) 15, and The Academic Dishonesty Scale. Data analysis used multiple regression analysis to see the effect of two independent variables on one independent variable. The results showed that the hypothesis we proposed was accepted, namely that there was an effect of academic stress and religiosity on academic dishonesty. The effect value is 0.080, or about 8%. The religiosity variable has a negative equation line value, while academic stress has a positive equation line value. The implications of this study are discussed.

Key Words

Academic dishonesty • Religiosity • Stress academic

[1] **Correspondance to:** Universitas Muhammadiyah Purwokerto, Indonesia. E-mail: herdian@ump.ac.id **ORCID:** 0000-0003-3452-1843
[2] Universitas Muhammadiyah Purwokerto, Indonesia. E-mail: itsnanurrahmamildaeni@ump.ac.id **ORCID:** 0000-0003-1272-7947
[3] Universitas Muhammadiyah Purwokerto, Indonesia. E-mail: fatinrohmahwahidah@ump.ac.id **ORCID:** 0000-0002-4955-179X
Citation: Herdian, H., Mildaeni, I. N., & Wahidah Nur, F. R. (2021). The role of academic stress and religiosity on academic dishonesty. *Research on Education and Psychology (REP)*, *5*(1), 31-40.

Academic dishonesty continues today. The problem of academic dishonesty has been around for a long time, dating back thousands of years, and it is done by most of the students. In comparison, efforts to improve academic integrity are relatively new and relatively rare, lasting only a few hundred years and being implemented by a small proportion of schools and colleges (Stephens et al., 2021).

The terms academic violation, academic dishonesty, or academic cheating are often used interchangeably, but the term academic misconduct is the negative side of the concept of academic integrity (Stephens et al., 2021). Academic offenses affect students, regardless of age, gender, or GPA. While individual and contextual influences play an essential role, understanding why students choose to cheat provides greater guidance when considering promoting academic integrity and preventing academic errors (Parnther, 2020). Some researchers specifically use the term cheating rather than academic error, letting participants define behavior according to their own moral and ethical guidelines (Morris, 2012).

This refers to the notion of academic dishonesty, which is an attitude that refers to the degree to which the person has a good evaluation or not (Beck & Ajzen, 1991). Academic dishonesty is broadly defined as any deceptive act or attempt by students to use illegal or unacceptable means in academic work (Lambert et al., 2003). It is more operationally explained by Simpson (2016) that when students misrepresent the words of others and are claimed as their own, whatever the conditions, they are doing work dishonestly. Academic dishonesty as intentional use or attempted material (cheating), making information or quotes (fabrication), assisting others in engaging in academically dishonest behavior (facilitation) and taking the action of others' words, ideas, or statements as their property (plagiarism).

Academic dishonesty research has been widely studied by linking several educational psychology variables, including motivation (Siaputra, 2013), growth mindset (Thomas, 2017), learning styles that are not deep (Jurdi et al., 2011), stress (Simpson, 2016) and others. Especially for students working on their final project, academic dishonesty is also found in students who use qualitative and quantitative methods (Herdian & Na'imah, 2018).

Religiosity

Religiosity is defined as how far the knowledge is, how strong the belief is, how obedient one is in the implementation of worship and rules, and how deep is one's appreciation of one's religion (Rahmawati, 2016). Religiosity is the deepening of a person's religion that involves symbols, beliefs, values , and behaviors driven by spiritual forces. These strengths are a complex combination of religious knowledge, feelings, and religious actions in a person (Astogini et al., 2011).

Several studies have reported a factor of religiosity that affects academic dishonesty (Khan et al., 2019; Onu et al., 2019). More clearly, Khan et al., (2019) examined the religiosity of Islam, where the behavior of students who pray five times and attend their places of worship for prayer activities tend to behave positively and ethically because of the awareness of right and wrong in every field of work, this activity. Implications for academics too. In Nelson et al., (2017), which examined religiosity in Christianity, students who behaved in "religious activities" also showed higher academic integrity. The act of attending church and participating in other religious activities is likely to reinforce the positive and ethical behavior of students by keeping their values prominent to them. In this case, the students' strong attitude in attending church and participating in other religious activities raises awareness of right and wrong, resulting in academic integrity (Nelson et al., 2017).

Based on the research results above, we also believe that religiosity teaches an understanding of good and bad behavior so that it can affect moral reasoning. So that it also affects their academic activities. Provides an experience of the core values that are important for academic integrity and decision-making and ethical behavior (Baumsteiger et al., 2013).

However, several other studies have found a positive relationship between religiosity and cheating. The more religious the subject, the more cheating they will commit (Guttmann, 1984; Pruckner & Sausgruber, 2008). We conclude that there is an imbalance in the results of previous studies that examined religiosity with unethical behavior, namely academic dishonesty. So this research needs to be done to reevaluate previous studies.

Academic Stress

The stress that students often experience is academic stress (Taufik et al., 2013). Academic stress is a source of stress that occurs in school settings (Calaguas, 2011). Sayekti, (2016) Academic stress is a condition in which students cannot face academic demands and perceive academic demands as a nuisance. Academic stressors cause academic stress.

Academic stress is related to cheating behavior (Barseli et al., 2017). Davis et al., (1992) said that academic stress is an essential determinant of academic fraud that occurs. It is similar to the case in postgraduate where the causes of cheating in postgraduate students find stress an important factor (Maramark & Maline, 1993). Several other studies have also shown that unethical behavior such as cheating is related to the level of student academic stress arising from excessive workloads, poor course delivery, and inadequate learning materials (Kohn & Frazer, 1986; Whitley, 1998).

Psychologically, students who experience academic stress will find it difficult to think well. So that if under certain conditions, it will, in turn, affect how these students do academic tasks. We assume that unethical behavior such as academic dishonesty is influenced by academic stress that occurs in students. According to Safaria et al., (2009) cheating behavior is a characteristic of students who experience academic stress.

Based on previous research results, we conclude that academic pressure or burden that makes students stressed and religious affects their ethical behavior, in this case on academic dishonesty. The purpose of this study is to examine how the two independent variables, namely religiosity and academic stress, together affect academic dishonesty?. The hypothesis in this study is academic stress and religiosity affecting academic dishonesty.

Method

This study uses a quantitative approach to determine the effect of two independent variables, including the dependent variable. Research participants were 227 students of private Islamic universities in Indonesia. We collected demographic data regarding the participant, for example, age, gender, faculty, and semester (see table 1).

Participants

In table 1. Participants based on age, it can be seen that 20 years of an age dominated this study, namely as many as 113 students, then students aged 19 years were 96 students. Meanwhile, the ages of 23 and 24 years are the minimum ages, namely three students respectively. Based on sex, female participants dominated this study as many as 171 students and male as many as 106 students. Based on faculty, students from the faculty of Economics and business dominate this research, namely as many as 73 students, while students from agriculture are at least as many as 15 students.

Table 1

Profile of research participants

		Frequency	Percent	Valid Percent	Cumulative Percent
age	18	7	2.527	2.527	2.527
	19	96	34.657	34.657	37.184
	20	113	40.794	40.794	77.978
	21	44	15.884	15.884	93.863
	22	11	3.971	3.971	97.834
	23	3	1.083	1.083	98.917
	24	3	1.083	1.083	100.000
	Total	277	100.000		
sex	Male	106	38.267	38.267	38.267
	Female	171	61.733	61.733	100.000
	Total	277	100.000		
faculty	Agriculture	15	5.415	5.415	5.415
	Economics and business	73	26.354	26.354	31.769
	Engineering & science	29	10.469	10.469	42.238
	Health science	38	13.718	13.718	55.957
	Pharmacy	30	10.830	10.830	66.787
	Psychology	37	13.357	13.357	80.144
	Teacher training and education	55	19.856	19.856	100.000
	Total	277	100.000		
semester	1	103	37.184	37.184	37.184
	3	107	38.628	38.628	75.812
	5	56	20.217	20.217	96.029
	7	5	1.805	1.805	97.834
	9	6	2.166	2.166	100.000
	Total	277	100.000		

Instruments

Stress Academic Scale

The data collection tool uses The academic stress inventory developed by Lin and Chen (2009) and adapted into the Indonesian version. The measuring instrument consists of 7 factors: such as teachers' stress, stress levels, tests stress, studying in groups stress, peer stress, time management stress, and self-inflicted stress. Thirty-four statement items with Likert's five-point scale were used, ranging from 5 completely agree to 1 completely disagree. The Academic stress inventory scale's reliability value is 0.925 with a validity value between 0.354 to 0.672.

Religiosity Scale

The data collection tool uses the measuring instrument The Centrality of Religiosity Scale (CRS) 15 by Huber & Huber, (2012) arranged based on five dimensions: Intellect, Ideology, Public practice, and Private practice, and Experience. Each item of the dimension has three statements and has a reliability of 0.869 with a validity value of 0.394 to 0.607.

Academic Dishonesty Scale

Data collection tools use an academic dishonesty scale that is built based on academic dishonesty measurements developed by McCabe & Trevino, (1993) and Stone et al., (2010) and has been adopted in Indonesia by Ampuni (2019). The academic dishonesty scale is based on three forms of academic dishonesty: cheating, illegal collaboration, and plagiarism, with several 14. Participants are asked to respond to statements such as: "Using tools that are not allowed to complete assignments" using a scale of 0-4 that has an explanation of 0 (never) up to 4 (very often). The academic dishonesty scale has a reliability of 0.904 with a validity value of 0.359 to 0.733.

Data Analysis

This research consists of two independent variables: academic stress and religiosity and one independent variable, namely academic dishonesty. The analysis used is multiple regression analysis to determine how the influence of the two independent variables on the dependent variable.

Findings

Based on the statistical analysis results, the results show that Table 2. above explains that the academic dishonesty variable can be explained by the religiosity and academic stress variables of 0.080 or about 8%. While the remaining 92% is explained by other factors not described in this study.

Table 2

Model Summary - Academic Dishonesty

Model	R	R^2	Adjusted R^2	RMSE
H_0	0.000	0.000	0.000	8.001
H_1	0.283	0.080	0.073	7.703

Furthermore, the F statistical test is carried out to determine the significance value of the model used. If the significance value <0.05, this model can be declared significant. The results of the F test analysis can be seen in Table 3.

Table 3

Test F statistic

	Sum of Squares	df	Mean Square	F	p
Regression	1410.365	2	705.182	11.886	< .001
Residual	16256.328	274	59.330		
Total	17666.693	276			

Note. The intercept model is omitted, as no meaningful information can be shown.

Based on Table 3. shows that the calculated F value is 11,886 with a probability <0,000 less than 0.05. This regression model can predict academic dishonesty or said that religiosity, academic stress, affect academic dishonesty.

Table 4

Partial Test Results of Significance (t-Test)

Model		Unstandardized	Standard Error	Standardized	t	p
H_0	(Intercept)	24.729	0.481		51.443	< .001
H_1	(Intercept)	33.873	5.763		5.877	< .001
	Academic Stress	0.074	0.023	0.189	3.247	0.001
	Religiosity	-0.262	0.076	-0.199	-3.436	< .001

Based on the results of multiple regression analysis presented in table 5, it shows that the constant value (α) = 33,873, the regression coefficient value (β1) is 0.074, and the regression coefficient value (β2) is -0.262. Based on these results, the regression equation can be determined as follows: Y = 33,873+ (0.074) X1 + (-0.262) X2. When viewed from the value of the positive academic stress regression coefficient, academic stress has a positive effect. Meanwhile, religiosity's regression coefficient is negative, meaning that religiosity variables have a negative effect on academic dishonesty.

Discussion

Based on this study's results, it was found that academic stress and religiosity affected academic dishonesty. In this study, religiosity and academic stress have a significant effect even though the effect value is not high.

Religiosity is defined as the deepening of one's religion that involves symbols, beliefs, values , and behavior-driven by spiritual forces. These strengths are a complex combination of religious knowledge, feelings, and religious actions in a person (Astogini et al., 2011). In previous research studies, we believe that religiosity's influence on unethical behavior such as academic dishonesty. Regarding the relationship between religiosity and academic dishonesty, they have a negative equation line, so it can be concluded that it can reduce academic dishonesty when religiosity increases. Our study differs from previous research, which states that there is a positive relationship between religiosity's influence on academic dishonesty, which means that the more religious the subject, the more cheating they commit (Guttmann, 1984; Pruckner & Sausgruber, 2008).

Regarding academic stress, this study confirms that academic stress influences academic dishonesty. Regarding the relationship between academic stress and academic dishonesty, it has a positive equation line, so it can be concluded that when academic stress increases, academic dishonesty also increases.

Based on a review of previous research results, stress on students can be a determinant of unethical behavior in academics, especially in academic dishonesty. Lal, (2014) states that academic stress is the stress related to the many academic demands such as pressures to show academic achievement, school exams, answering questions in class, and demands to show progress in learning. Academic stress in students is very subjective to an academic condition (Barseli et al., 2017).

The implementation of this research is that universities can pay attention to their students' religiosity as an effort that can be done to reduce unethical behavior of academic dishonesty. Besides, the staff at higher education institutions, in this case, lecturers as teachers, can pay attention to students' academic workload. We realize that students' subjective perceptions of academic load are difficult for lecturers to control, but this study can consider lecturers in providing fun learning strategies. This is intended so that students do not feel burdened by their responsibilities. Besides, we realize that there are several shortcomings in this study, including in data analysis techniques. We did not separate the two independent variables in the data analysis.

Based on our research results, which states that there is an effect of the two independent variables, namely religiosity and academic stress, on academic dishonesty. At the same time, the results of this study confirm the results of previous studies that state a positive relationship between religiosity and academic dishonesty. However, in this study, we found negative equation line values of religiosity against academic dishonesty. The implication of this research can be used on the faculty in higher education, especially religion-based, to increase religiosity in students. This is done to reduce dishonest behavior among students. Besides, academic stress that affects academic dishonesty with a positive equation line value can be applied in academics, especially lecturers to pay attention to how the academic workload is given to students.

References

Ampuni, S. (2019). Academic Dishonesty in Indonesian College Students: an Investigation from a Moral Psychology Perspective. *Journal of Academic Ethics*. https://doi.org/10.1007/s10805-019-09352-2

Astogini, D., Wahyudin, & Wulandari, S. Z. (2011). Religiosity Aspects in Purchasing Decisions of Halal Products. *Jeba*, *13*(1), 1–8.

Barseli, M., Ifdil, I., & Nikmarijal, N. (2017). Konsep stres akademik siswa. *Jurnal Konseling Dan Pendidikan*, *5*(3), 143–148. https://doi.org/https://doi.org/10.29210/119800

Baumsteiger, R, Chenneville, T., & McGuire, J. F. (2013). The roles of religiosity and spirituality in moral reasoning. *Ethics & Behavior, 23 (4), 266-277*. https://www.tandfonline.com/doi/abs/10.1080/10508422.2013.782814

Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality*, *25*(3), 285–301. https://doi.org/10.1016/0092-6566(91)90021-H

Calaguas, G. M. (2011). College academic stress: Differences along gender lines. *Journal of Social and Development Sciences*, *1*(5), 194–201. https://doi.org/https://doi.org/10.22610/jsds.v1i5.644

Davis, S. F., Grover, C. A., Becker, A. H., & Mcgregor, L. N. (1992). Academic Dishonesty: Prevalence, Determinants, Techniques, and Punishments. *Teaching of Psychology, 19(1), 16-20*. https://doi.org/10.1207/s15328023top1901_3

Guttmann, J. (1984). Cognitive morality and cheating behavior in religious and secular school children. *The Journal of Educational Research, 77(4), 249-254.* https://www.tandfonline.com/doi/abs/10.1080/00220671.1984.10885533

Herdian, & Na'imah, T. (2018). Qualitative or quantitative which allows the case of academic dishonesty? *International Journal of Psychoanalysis and Education (IJPE)*, *10*(2), 41–48.

Huber, S., & Huber, O. W. (2012). The Centrality of Religiosity Scale (CRS). *Religions*, *3*(3), 710–724. https://doi.org/10.3390/rel3030710

Jurdi, R., Hage, H. S., & Chow, H. P. H. (2011). Academic Dishonesty in the Canadian Classroom: Behaviours of a Sample of University Students. *Canadian Journal of Higher Education*, *41*(3), 1–35. http://0-search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=eric&AN=EJ959454&site=ehost-live&scope=site%5Cnhttp://ojs.library.ubc.ca/index.php/cjhe/article/view/1/2304

Khan, I. U., Khalid, A., Hasnain, S. A., Ullah, S., Ali, N., & Zealand, N. (2019). The ımpact of religiosity and spirituality on academic dishonesty of students in Pakistan. *European Online Journal of Natural and Social Sciences*, *8*(3), 381–398. http://european-science.com/eojnss/article/view/5525

Kohn, J. P., & Frazer, G. H. (1986). An academic stress scale: Identification and rated ımportance of academic stressors. *Psychological Reports*, *59*(2), 415–426. https://doi.org/10.2466/pr0.1986.59.2.415

Lal, K. (2014). Academic stress among adolescent ın relation to ıntelligence and demographic factors. *American International Journal of Research in Humanities, Arts and Social Sciences*, *5*(1), 123–129. https://doi.org/10.1108/eb016458

Lambert, E. G., Hogan, N. L., & Barton, S. M. (2003). Collegiate academic dishonesty revisited: What have they done, how often have they done it, who does it, and why did they do it? *Electronic Journal of Sociology, 7(4), 1-27.*

Lin, Y. M., & Chen, F. S. (2009). Academic stress inventory of students at universities and colleges of technology. *World Transactions on Engineering and Technology Education*, *7*(2), 157–162. http://www.wiete.com.au/journals/WTE&TE/Pages/Vol.7, No.2 (2009)/8-03-Lin-Y.M.pdf

Maramark, S., & Maline, M. (1993). *Academic Dishonesty Among College Students. Issues in Education.* http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED360903

McCabe, D. L., & Trevino, L. K. (1993). Academic Dishonesty: Honor Codes and Other Contextual Influences. *The Journal of Higher Education*. https://doi.org/10.2307/2959991

Morris, R. C. (2012). The Relative Influence of Values and Identities on Academic Dishonesty: A Quantitative Analysis. *Current Research in Social Psychology, 20(1), 1-20.*

Nelson, M. F., James, M. S. L., Miles, A., Morrell, D. L., & Sledge, S. (2017). Academic Integrity of Millennials: The Impact of Religion and Spirituality. *Ethics and Behavior, 27(5), 385-400*. https://doi.org/10.1080/10508422.2016.1158653

Onu, D. U., Onyedibe, M. C. C., Ugwu, L. E., & Nche, G. C. (2019). Relationship between religious commitment and academic dishonesty: is self-efficacy a factor? *Ethics and Behavior, 31(1), 13-20.* https://doi.org/10.1080/10508422.2019.1695618

Parnther, C. (2020). Academic Misconduct in Higher Education: A Comprehensive Review. *Journal of Higher Education Policy And Leadership Studies*, *1*(1), 25–45. https://doi.org/10.29252/johepal.1.1.25

Pruckner, G. J., & Sausgruber, R. (2008). Honesty on the Streets-A Natural Field Experiment on Newspaper Purchasing. *Available at SSRN 1277208*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1277208

Rahmawati, H. K. (2016). Kegiatan Religiusitas Masyarakat Marginal di Argopuro. *Community Development*, *1*(2), 35–52.

Safaria, T. & N. S. (2009). Manajemen Emosi: Sebuah Panduan Cerdas Bagaimana Mengelola Emosi Positif dalam Hidup Anda. In *Jakarta: Bumi Aksara*. Bumi Aksara.

Sayekti, E. (2016). Efektifitas Teknik Self-Instruction dalam Mereduksi Stress Akademik pada Siswa Kelas XI MA YAROBI Kec. Grobogan, Kab, Grobogan Tahun 2016/2017 (Doctoral dissertation, IAIN Salatiga).

Siaputra, I. B. (2013). The 4PA of plagiarism: A psycho-academic profile of plagiarists. *International Journal for Educational Integrity*, *9*(2). https://doi.org/10.21913/IJEI.v9i2.892

Simpson, D. (2016). Academic dishonesty: An international student perspective. *Higher Education Politics & Economics*, *2*(1), 111–123. https://doi.org/10.32674/hepe.v2i1.22

Simpson, Denise. (2016). Academic dishonesty: An international student perspective. *Higher Education Politics & Economics, 2(1), 5*. https://doi.org/10.32674/hepe.v2i1.22

Stephens, J. M., Watson, P. W. S. t J., Alansari, M., Lee, G., & Turnbull, S. M. (2021). Can online academic ıntegrity ınstruction affect university students' perceptions of and engagement in academic dishonesty ? Results from a natural experiment in New Zealand. *Front. Psychol*, *12*(February), 1–16. https://doi.org/10.3389/fpsyg.2021.569133

Stone, T. H., Jawahar, I. M., & Kisamore, J. L. (2010). Predicting academic misconduct intentions and behavior using the theory of planned behavior and personality. *Basic and Applied Social Psychology*, *32*(1), 35–45. https://doi.org/10.1080/01973530903539895

Taufik, T., Ifdil, I., & Ardi, Z. (2013). Kondisi Stres Akademik Siswa SMA Negeri di Kota Padang. *Jurnal Konseling Dan Pendidikan*, *1*(2), 143–150. https://jurnal.konselingindonesia.com/index.php/jkp/article/view/22

Thomas, D. (2017). Factors that explain academic dishonesty among university students in Thailand. *Ethics and Behavior*, *27*(2), 140–154. https://doi.org/10.1080/10508422.2015.1131160

Whitley Jr, B. E. (1998). Factors Associated with Cheating Among College Students: A review. *Research in Higher Education*, *39*(3), 235–274.

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: April 18, 2021 e-ISSN: 2602-3733
Accepted: May 8, 2021
http:// dergipark.org.tr/rep
June 2021 ◆ 5(1) ◆ 41-52

Research Article **Published: 06.30.2021**

Cyberloafing Level of University Students: A Scale Development Study*

Mustafa Sarıtepeci[1]
Necmettin Erbakan University

Uğurcan Sert[2]
Ministry of National Education

Abstract

Considering the destructive effects of cyberloafing behaviors on learning-teaching activities, it gains importance what the underlying causes of such behaviors, and which variables are related to them. In the literature, the emphasis on commonly used technologies in cyberloafing scales, which were frequently opted for, was generally developed necessitates these scales to be reviewed over time. In this context, it was aimed to develop a valid, reliable, and up-to-date scale for determining the level of cyberloafing behavior of university students in educational settings. For this purpose, the literature and previously developed scales related to cyberloafing were examined. Based on the literature review and the addressed cyberloafing scales, a 26-item scale form created. Data were collected from 312 participants with the online data collection form, and EFA and CFA were carried out with this collected data. As a result of the analyzes, a valid, reliable, and up-to-date cyberloafing scale in education settings with 13 items and 3-subscales was created. The internal consistency coefficient of the scale and subscales range between .77-91.

Key Words

Cyberloafing • Educational settings • Scale development • University students

* This study is the expanded version of the oral presentation presented at the 1st National Digital Transformation in Education Symposium.

[1] **Correspondance to:** Faculty of Ereğli Education, Necmettin Erbakan University, Konya, Turkey. E-mail: mustafasaritepeci@gmail.com **ORCID:** 0000-0002-6984-0652

[2] Ministry of National Education, Antalya, Turkey. E-mail: ugurcansert35@gmail.com **ORCID:** 0000-0003-2654-5853

Citation: Sarıtepeci, M., & Sert, U. (2021). Cyberloafing level of university students: A scale development study. *Research on Education and Psychology (REP)*, *5*(1), 41-52.

The use of information and communication technologies (ICT) in workplaces has composed a more creative, flexible environment for employees that will allow self-improvement (Anandarajan et al., 2004; Oravec, 2002; Stanton, 2002). Thus, IT has become an essential part of work environments (Henle & Blanchard, 2008). The widespread use of ICT in workplaces has facilitated the way of doing tasks and has significantly increased productivity, but it has brought its inconvenient usage instead of work tasks. As a matter of fact, in addition to ICT is used for communication, cooperation, and data management in workplaces, the employees exploit the opportunities maintained to them by using ICT for their purposes (Yildiz-Durak & Saritepeci, 2019). This situation is expressed as hidden laziness, which is called cyberloafing or cyberslacking (Lim, 2002). In other words, cyberloafing is stated as the use of ICT tools and Internet access facilities ensured in the workplace or owned by the employees outside of the duties expected from them (Lim, 2002; Lim et al., 2002). Employees generally exhibit cyberloafing for purposes such as communicating, getting information, and having fun (Li & Chung, 2006), and this situation is classified as counter-productivity behaviors (Blancard & Henle, 2008). Thus, the prevalence of cyberloafing behaviors causes various productivity-decreasing situations such as financial loss in workplaces, a slowdown in internet connection, and business disruption (Sipior & Ward, 2002). Especially with the increase in mobile device ownership and the improvement in access opportunities with these devices, cyberloafing is not limited to workplaces, but also emerges as an important problem in educational settings (Saritepeci, 2020b; Yildiz-Durak & Saritepeci, 2019).

Thanks to the use prevalence of ICT tools in educational settings, access to information has been made easy, and these tools have become an indispensable part of the educational settings. Learners can reach course content, training videos, and materials by computers, tablets, and smartphones (Galluch & Thatcher, 2011; Ragan et al., 2014; Taneja et al., 2015). Besides, by using these tools, they can actively participate in various creative design-based learning activities where they find the opportunity to reflect on themselves (Saritepeci, 2020a; Saritepeci & Çakır, 2019). However, the prevalence of ICT tools and individual mobile device ownership in educational settings revealed learners use them in a way that reduces the efficiency of both their own and others' learning-teaching processes (Saritepeci, 2020b). As a matter of fact, learners exhibit various cyberloafing behaviors such as surfing on social media, sharing, searching, gaming, texting, watching, gambling, and taking photos in educational settings (Koay, 2018; Vitak et al., 2011; Yildiz Durak, 2020).

Tindell and Bohlander (2012) stated in their study that 95% of the learners brought their smartphones to school. They reported that 92% of the learners used their smartphones for their personal purposes in the lesson, and 10% used them as a cheating tool during the exam. With the increase of access opportunities offered in schools, the use of these by students for purposes such as entertainment and gameplay, etc. becomes an important threat to effective learning and teaching day by day (Saritepeci, 2020b).

Considering the destructive effects of cyberloafing behaviors on learning-teaching activities, it gains importance what the underlying causes of such behaviors, and which variables are related to them. For this purpose, various scales have been developed in the literature to determine the form and level of cyberloafing in educational settings (CES) (Akbulut et al., 2016; Blanchard & Henle, 2008; Koay, 2018; Polat, 2018; Yaşar, 2013), and many studies have been conducted using these scales to detected cyberloafing level, antecedents and consequences (Baturay & Toker, 2015; Demirtepe-Saygılı & Metin-Orta, 2020; Dursun et al., 2018; Gökçearslan et al., 2018; Masadeh, 2021; Saritepeci, 2020b; Sharma, 2020; Wu et al., 2018; Yildiz Durak, 2020). In the literature, the emphasis on commonly used technologies in cyberloafing scales, which are frequently opted for, is generally developed necessitates these scales to be reviewed over time. In this context, it is aimed to develop an up-to-date scale for determining the level of cyberloafing in educational settings.

Purpose of the Study

This study was aimed to improve a valid, reliable, and up-to-date Likert-type measurement tool used to determine the level of cyberloafing behavior of university students in educational settings.

Social Purposeful Cyberloafing in Educational Environments

Social factors constitute a substantial part of cyberloafing activities that express the use of ICT tools, especially the Internet, for personal purposes of individuals not related to tasks or learning in work/education settings (Hussain et al., 2017). The social factors stated here are closely related to the network of relationships in the real and virtual life of the individual. Interacting with others during work or class time is likely to reduce the individual's interest in the job/lesson (Wu et al., 2020). This condition affects decreasing productivity in both work and education settings. Additionally, using ICT for socializing during learning-teaching activities is one of the most common forms of cyberloafing encountered in educational settings (Baturay & Toker, 2015; Dursun et al., 2018; Saritepeci, 2020b; Toker & Baturay, 2021). This situation is bonded with the prevalence of social media use and the increase in the time spent on social media. As a matter of fact, in the Digital 2021 report, the number of active social media users increased by 13.2% compared to the previous year and reached 4.20B (We Are Social, 2021a). Likewise, in Turkey also an 11.1% increase compared to the previous year, the number of active social media users has been 60 million (We Are Social, 2021b). In this report, for people aged 16-64 in Turkey, daily use of social media has been 2H 57M.

Game Purposeful Cyberloafing in Educational Settings

Another type of cyberloafing behavior frequently encountered in work / educational settings is gaming (Akbulut et al., 2017; Vitak et al., 2011). Digital games appeal to a wide range of age groups with visual and auditory effects and realistic actions (Cha & Seo, 2018; Garris et al., 2002; Liu et al., 2016). Indeed, in the Digital-2021 report, the world rate of those in the 16-64 age group play digital games across 92.5%, while 86.9% are in Turkey (We Are Social, 2021a, 2021b). Also, in this age group, 74.9% in the world and 83.3% in Turkey play games via smartphone. It can be said that the prevalence of digital games that appeal to a large part of society and the ease of access with mobile devices have the potential to cause game addiction in individuals as a result of prolonged and uncontrolled playing (Lemmens et al., 2009). As the addiction level of individuals increases, they display cyberloafing behaviors by playing digital games in the work/education settings (Tanrıverdi & Karaca, 2018). The increment in GPC leads to a decline in productivity in learning and teaching processes.

Academic Cyberloafing in Educational Settings

CES is not just limited to behaviors, such as socializing, entertainment, and gaming, irrelevant to teaching-learning activities during course hours. Individuals also exhibit cyberloafing behaviors, which comprise the use of the Internet and ICT tools to reach different and detailed content related to self-development or education/work tasks (Blanchard & Henle, 2008; Seçkin & Kerse, 2017).

Method

This study is an up-to-date, valid, and reliable scale development study to specify the levels of CES of university students.

Participants

The participants of this study are 312 students, 36.22% of the participants are male, and 63.78% are female, enrolled in various universities in Turkey. The average age of the participants is 20.98, and 44.87% are first-year students. Besides, the average daily internet usage time of the participants is 5.39 hours.

Scale Development Process

To develop a valid and reliable measurement tool to determine the level of cyberloafing behaviors have exhibited by university students in educational settings, the literature and previously developed scales related to cyberloafing (Akbulut et al., 2016; Blanchard & Henle, 2008; Koay, 2018; Polat, 2018; Yaşar, 2013) were examined. Especially the "Cyberloafing Scale" developed by Akbulut et al. (2016), which is preferred frequently in the domestic literature, and the "Smartphone Cyberloafing Scale in Classes" developed by Polat (2018) were taken as a basis. The draft scale consisting of 26 items based on the literature review and the addressed cyberloafing scales to develop an up-to-date, valid, and reliable measurement instrument. The draft form prepared was rearranged in line with the feedback of two experts who were experienced scale development and had various studies on CES. Subsequently, interviewing four university students with a focus group study were reviewed the scale items in the context of clarity. With this review, the expression styles in some items were changed, and the 26-item scale form was made ready for application. The prepared scale form has a five-point Likert-type rating: "1= Never", "2= Rarely", "3= Sometimes", "4= Often", "5= Always". There are no items needed for reverse scoring on the scale, and high scores from the scale indicate that the level of cyberloafing is high.

Data Analysis

In specifying the sample size, the criteria for at least 10 observations for each item and reaching at least 300 participants (Comrey, 1988) were taken into account. In the study, 312 participants were achieved, and the number of observations for each variable was 12 (312/26). Pursuant, the sample size reached in the study is sufficient.

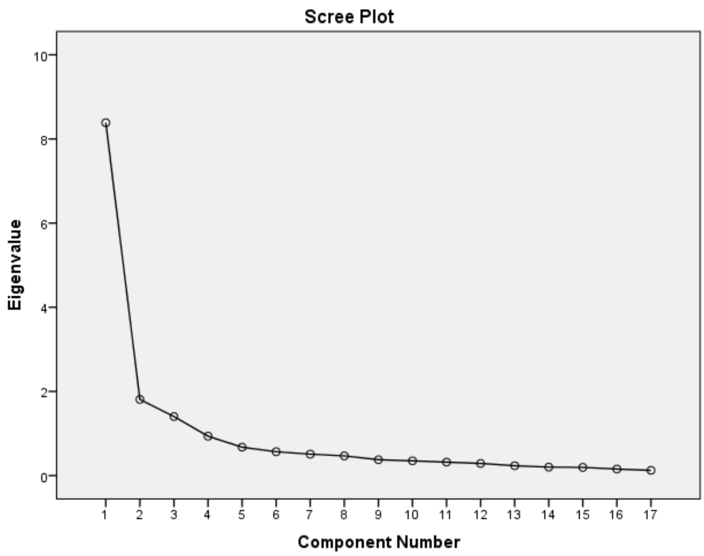
To specify the factor structure of the 26-item scale form, exploratory factor analysis (EFA) was analyzed using SPSS 27 software. Confirmatory factor analysis (CFA) was performed with AMOS 27 version to check the compatibility of the factor structure revealed as a result of EFA with the data. The goodness of fit metrics CMIN / DF, GFI (Goodness of Fit Index), CFI (Comparative Fit Index), and RMSEA (Root Mean Square Error of Approximation) were used to determine the fit between CFA and data. Cronbach alpha reliability coefficient was calculated for the scale and subscales to determine the reliability level of the final scale form created with EFA and CFA.

Results

The Kaiser Meyer Olkin coefficient of the data collected for Scale of Cyberloafing in Educational Settings (SCES) was calculated as .926, and Bartlett's Test of Sphericity was significant at the p <.01 level (X2=5350.412, p=.000). These values demonstrated that the Cyber Leisure Scale data set is suitable for EFA (Cohen et al., 2017; Tabachnick & Fidell, 2007). To specify the factor structure of the SCES, factors with an eigenvalue greater than 1, and at least 5% explanatory were taken into account within the framework of the Kaiser-Guttman principle. Besides, the lower limit of item factor load was determined as .45 (Büyüköztürk, 2011; Tabachnick et al., 2007). According to the EFA result, a 5-factor structure with an eigenvalue greater than 1 was formed. Even though the eigenvalue of the two factors is above 1, their explanatory remained below 5% and there were 2 items in each of these two factors. It is recommended that there are at least 2 and usually 3 or more items in one factor, and the least explanation level is around 5%. EFA was repeated by removing the items in these two factors since they did not meet these conditions and i16 that had no factor loading .45 or more. By the analysis results, there were 3 factors with eigenvalues greater than 1. It was specified that i1, i2, i8, i10, and i17 items have factor load values below .45 in all of the factors. These items were removed one by one from the lowest to the highest factor loading, and EFA repeated, and all of these items were removed from the scale because the factor loading was below the determined critical value. As a result, a structure with three factors (Factor 1: 7.83, Factor 2: 1.81, Factor 3: 1.35) was formed with an eigenvalue higher than one and an explanatory above 5% (See Figure 1, Table 1).

Figure 1

Line Chart of SCES Factor



According to Table 1, the factor load values of the items varied between .59 and .93. Factors were named in line with the relevant literature and the items (Factor 1: Social Purposeful Cyberloafing (SPC), Factor 2: Academic Cyberloafing (AC), and Factor 3: Gaming Cyberloafing (GPC)). There were 9 items in the SPC subscale, and it had 48.95% explanatory. AC subscale included 4 items, and 11.32% of the total variance was explained. There were 3 items in the GPC subscale, and it had 8.46% explanatory. Accordingly, the total explanation of the three-factor structure was 68.73%.

Table 1

SCES factor load values

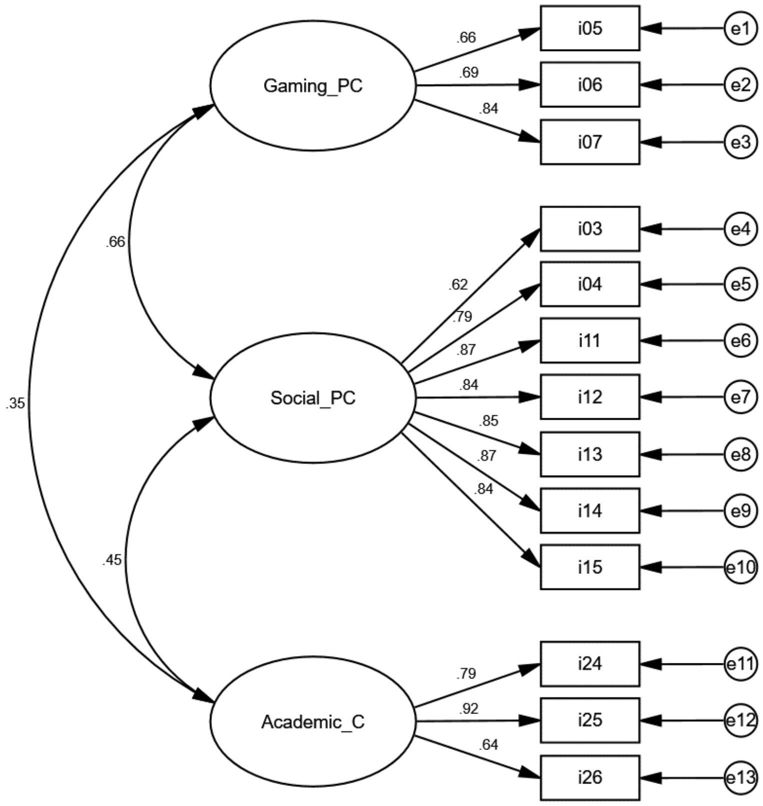
SCES Items	Factor loading		
	1	2	3
Factor 1: Social Purpose Cyberloafing			
04 I frequently check notifications on my social media (Instagram, Facebook, Twitter, TikTok, etc.) accounts.	.93		
14 I like and comment on social media (Instagram, Facebook, Twitter, TikTok, etc.) posts.	.85		
03 I often check for instant online messaging apps (WhatsApp, Messenger, etc.).	.83		
11 I browse through social media (Instagram, Facebook, Twitter, TikTok, etc.) posts.	.82		
12 I canvass my friends' social media (Instagram, Facebook, Twitter, TikTok, etc.) profiles.	.80		
09 I message via instant online messaging applications (WhatsApp, Messenger, Beep, etc.).	*.78****		
15 I share stories on social media (Instagram, Facebook, Twitter, TikTok, WhatsApp etc.).	.77		
13 I share text, photo, video etc. on social media (Instagram, Facebook, Twitter, TikTok, etc.).	.73		
22 I take a photo or a selfie.	*.62**		
Factor 2: Academic Cyberloafing			
24 I read digital texts on the issue covered in the course.		.89	
25 I watch videos on the subject covered in the lesson.		.89	
26 I try to find the answer to a question asked during the lesson on the Internet.		.77	
I use a smartphone, tablet PC or computer to study different lessons or topics of interest.		*.59**	
Factor 3: Gaming Purpose Cyberloafing			
05 I play games (Fortnite, PubG, Minecraft, etc.) that more than one person can play over the internet.			.83
06 I play digital games (candy crush, angry bird, arcade games, etc.) that do not require an internet connection.			.81
07 I download games or apps.			.68
Eigenvalues	7.83	1.81	1.35
Variance Explained	%48.95	%11.32	%8.46
Total Variance Explained	%68.73		

Note. N=312. The extraction method was principal component analysis with a direct oblimin with Kaiser normalization rotation. Factor loading below .30 are not presented in the table. **** Items written in italics were removed from the scale as a result of the CFA****.*

The construct compatibility of the SCES was tested with CFA using AMOS 27.0. It was identified that the goodness of fit values was out of the reference range as a result of CFA. Primarily the standardized regression weights were checked and it was understood that all values were above the acceptable threshold of .5. Thereupon, modification indices (MI) were examined, and it was seen that some items (i09, i20, i22) had high MI with items in different subscales. Thereupon Standardized Residual Covariances (SRC) were examined, and it was established that the SRC value between i09, i20, and i22 with items in other dimensions was above 2.58. Values greater than "2.58" are considered problematic values (Byrne, 2010). Therefore, these items were removed from the analysis one by one, and CFA was repeated, and these items were removed because the problematic view regarding the items continued. DFA was repeated after the corrections were applied (See Figure 2). According to the findings, acceptable and good fit values were obtained (X2 / df = 2.689 RMSEA = .074, CFI = .965, GFI = .926). The goodness of fit values acquired as a result of CFA showed that the three-factor structure is acceptable and compatible with the data (Tabachnick & Fidell, 2007).

Figure 2

CFA model of the SCES



EFA was repeated due to changes in the factor structure with CFA. As a result of EFA, the 3-factor structure was preserved, and the explained variance increased from 68.73% to 72.61% (See Appendix 1). Descriptive findings obtained from the final SCES were presented in Table 2. Accordingly, the SCES average score of the participants was 32.25. Pursuant, it can be said that the participants' CES level was low. While the highest mean score in the subscales was SPC (M / k = 2.70), the lowest mean score was in the GPC (M / k = 1.79) subscale.

Table 2

Descriptive Findings

Factor	k*	M	M/k	Sd	Min	Max	Skewness	Kurtosis
SPC	7	18.92	2.70	7.66	7.00	35.00	.346	-.847
AC	3	7.95	2.65	3.18	3.00	15.00	.436	-.560
GPC	3	5.39	1.79	2.88	3.00	15.00	1.207	.572
SCES	13	32.25	2.02	11.27	13.00	65.00	.355	-.630

**k: number of items*

After testing the factor structure of the scale and subsequently the construct validity, the Cronbach alpha value was calculated to determine the internal consistency level of the SCES. Accordingly, the SCES internal consistency coefficient was calculated as .91. Cronbach alpha internal consistency coefficients for the scale sub-dimensions were calculated as .82 for SPC, .82 for AC, and .77 for GPC. Since the calculated internal consistency coefficient was higher than .70 (Gürbüz & Şahin, 2014), it was an indication that SCES and scale sub-dimensions have a reliable structure. SCES scale item statistics presented in Table 3. Considering that 0.30

and above are acceptable values for item-total correlation, it could be said that all items in the scale were above the desired item-total correlation value and are good items.

Table 3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
i03	28.87	110.13	.60	.55	.905
i04	29.22	106.13	.72	.70	.900
i05	30.56	114.69	.44	.40	.911
i06	30.63	116.07	.48	.41	.909
i07	30.17	108.72	.61	.54	.905
i11	29.24	102.56	.82	.76	.895
i12	29.86	105.50	.76	.66	.898
i13	30.02	104.00	.79	.82	.897
i14	29.75	105.30	.78	.78	.897
i15	29.87	104.65	.77	.76	.898
i24	29.69	114.86	.43	.57	.911
i25	29.87	111.39	.52	.63	.908
i26	29.25	113.60	.44	.44	.912

Discussion

The concept of cyberloafing emerged as a result of the find a place of ICT tools in workplaces and the widespread use of Internet access among employees, and the use of these tools and Internet access for personal purposes not related to their work tasks. The widespread use of ICT in educational settings, the increase in the rate of mobile device ownership of students, and the widespread use of Internet access opportunities have made cyberloafing behavior an important issue for educational settings. It can be said that cyberloafing behaviors in educational settings affect learning-teaching efficiency in general negatively. Therefore, it often creates negative results in terms of learning-teaching activities. This situation reveals the need for a measurement tool to reveal the level of cyberloafing behaviors of students and the structures associated with them in educational environments and to take measures against them. In this context, the study aims to develop a reliable, valid, and up-to-date scale to determine the level of cyberloafing in university students' educational settings. For this purpose, the scales (Akbulut et al., 2016; Blanchard & Henle, 2008; Koay, 2018; Polat, 2018; Yaşar, 2013) frequently preferred in research and the literature related to cyberloafing in educational settings were examined. As a result of preliminary examinations, a 26-item scale form was created. Data were collected from 312 people with the online data collection form, and EFA and CFA were carried out with this collected data.

EFA unveiled a structure consisting of 3 factors and 16 items. CFA was performed to determine the construct validity of this 3-factor structure. As a result of CFA, 3-items were removed from the scale for various reasons. It was determined that the 3-factor structure showed an acceptable fit with CFA. EFA was repeated due to changes in scale structure with CFA (see Appendix 1). Accordingly, there are 7-items in the SPC subscale and explain 49.50% of the total variance. AC has 3-items and 13.25% explanatory, while GPC has 3-items and accounted for 9.81%. Pursuant, the total variance explained by the three-factor structure is 72.61%. The Cronbach alpha internal consistency coefficient was calculated to determine the reliability level of the final form of the SCES, and the internal consistency value for the scale and subscales was calculated between .77 and .91.

Suggestions

In this study, a valid, reliable, and up-to-date scale has been developed to specify the types of cyberloafing behaviors of university students exhibit in educational environments and their level. With Covid-19, a significant portion of university students participates in educational activities through emergency remote teaching environments. In these settings, the form and direction of students' cyberloafing behavior might have changed. Therefore, it is thought that the screening studies to determine the cyberloafing levels of students in distance education settings and the variables they are related to will have important outcomes.

Social-purpose cyberloafing stands out more than other dimensions in terms of average and number of items. It is suggested that future studies focus on social cyberloafing behaviors be addressed within the framework of students' sensitivity to social impact.

Limitations

This study had some limitations. One of the most substantial limitations of this study was that EFA and CFA analyzes were performed on data obtained from the same group in the scale development study. Although this situation has been seen as an acceptable limit in the literature, commonly, it is suggested that these analyzes are made with the data obtained from different groups.

Ethic

It has complied with ethical principles in this study. Ethics committee approval was obtained from Bartın University Social Sciences and Humanities Ethics Committee (Bartın Üniversitesi Sosyal ve Beşeri Bilimler Etik Kurulu) for this study on 31.08.2020 with the decision numbered 2020-SBB-0180.

Conflict of Interest

The authors declare that they have no conflict of interest.

References

Akbulut, Y., Dönmez, O., & Dursun, Ö. Ö. (2017). Cyberloafing and social desirability bias among students and employees. *Computers in Human Behavior*, *72*, 87-95.

Akbulut, Y., Dursun, Ö. Ö., Dönmez, O., & Şahin, Y. L. (2016). In search of a measure to investigate cyberloafing in educational settings. *Computers in Human Behavior*, *55*, 616-625.

Anandarajan, M., Devine, P., & Simmers, C. A. (2004). A multidimensional scaling approach to personal web usage in the workplace. *Personal web usage in the workplace: A guide to effective human resources management*, (pp.61-79). IGI Global.

Baturay, M. H., & Toker, S. (2015). An investigation of the impact of demographics on cyberloafing from an educational setting angle. *Computers in Human Behavior*, *50*, 358-366.

Blancard, A. L., & Henle, C. A. (2008). Correlaates of different forms of cyberloafing: The role of norms and external locus of control. *Computer in Human Behavior, 24*, 1067-1084.

Blanchard, A. L., & Henle, C. A. (2008). Correlates of different forms of cyberloafing: The role of norms and external locus of control. *Computers in Human Behavior*, *24*(3), 1067-1084.

Büyüköztürk, Ş. (2011). *Handbook of data analysis for social sciences* [In Turkish] (15 ed.). Pegem Academy.

Byrne, B. M. (2010). Structural equation modeling with AMOS: basic concepts, applications, and programming (multivariate applications series). *New York: Taylor & Francis Group*, *396*, 7384.

Cha, S.-S., & Seo, B.-K. (2018). Smartphone use and smartphone addiction in middle school students in Korea: Prevalence, social networking service, and game use. *Health psychology open*, *5*(1), 2055102918755046.

Cohen, L., Manion, L., & Morrison, K. (2017). *Research methods in education* (pp. 440-456). Routledge.

Comrey, A. L. (1988). Factor-analytic methods of scale development in personality and clinical psychology. *Journal of consulting and clinical psychology*, *56*(5), 754-761.

Demirtepe-Saygılı, D., & Metin-Orta, I. (2020). An investigation of cyberloafing in relation to coping styles and psychological symptoms in an educational setting. *Psychological reports*, 0033294120950299.

Dursun, O. O., Donmez, O., & Akbulut, Y. (2018). Predictors of Cyberloafing among Preservice Information Technology Teachers. *Contemporary Educational Technology, 9*(1), 22-41.

Galluch, P., & Thatcher, J. (2011). Maladaptive vs. faithful use of internet applications in the Classroom: An empirical examination. *Journal of Information Technology Theory and Application (JITTA)*, *12*(1), 5-21.

Garris, R., Ahlers, R., & Driskell, J. E. (2002). Games, motivation, and learning: A research and practice model. *Simulation & gaming*, *33*(4), 441-467.

Gökçearslan, Ş., Uluyol, Ç., & Şahin, S. (2018). Smartphone addiction, cyberloafing, stress and social support among university students: A path analysis. *Children and Youth Services Review*, *91*, 47-54. https://doi.org/10.1016/j.childyouth.2018.05.036

Gürbüz, S., & Şahin, F. (2014). *Sosyal bilimlerde araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.

Henle, C. A., & Blanchard, A. L. (2008). The interaction of work stressors and organizational sanctions on cyberloafing. *Journal of Managerial Issues*, *20*(3), 383-400.

Hussain, S., Thurasamy, R., & Malik, M. I. (2017). Determinants of cyberloafing: a comparative study of a public and private sector organization. *Internet Research*, *27*(1). https://doi.org/10.1108/IntR-12-2014-0317

Koay, K.-Y. (2018). Assessing Cyberloafing Behaviour among University Students: A Validation of the Cyberloafing Scale. *Pertanika Journal of Social Sciences & Humanities*, *26*(1).

Lemmens, J. S., Valkenburg, P. M., & Peter, J. (2009). Development and validation of a game addiction scale for adolescents. *Media Psychology*, *12*(1), 77-95.

Li, S. M., & Chung, T. M. (2006). Internet function and Internet addictive behavior. *Compters in Human Behavior, 22(6)*, 1067-1071.

Lim, V. K. (2002). The IT way of loafing on the job: Cyberloafing, neutralizing and organizational justice. *Journal of Organizational Behavior*, *23*(5), 675-694.

Lim, V. K., Teo, T. S., & Loo, G. L. (2002). How do I loaf here? Let me count the ways. *Communications of the ACM*, *45*(1), 66-70.

Liu, C.-H., Lin, S.-H., Pan, Y.-C., & Lin, Y.-H. (2016). Smartphone gaming and frequent use pattern associated with smartphone addiction. *Medicine*, *95*(28), 1-4.

Masadeh, T. S. Y. (2021). Prevalence of Nomophobia and Cyberloafing Behaviors among Undergraduate Students. *European Journal of Education Studies*, *8*(2), 342-361.

Oravec, J. A. (2002). Constructive approaches to Internet recreation in the workplace. *Communications of the ACM*, *45*(1), 60-63.

Polat, M. (2018). Derslerde akıllı telefon siber aylaklığı ölçeği (DATSAÖ): Üniversite öğrencileri için bir ölçek uyarlama çalışması [The smart phone cyberloafing scale in classes (SPCSC): A scale adaptation study for university students]. *Social Sciences Studies Journal (SSSJournal)*, *4*(21), 3114-3127.

Ragan, E. D., Jennings, S. R., Massey, J. D., & Doolittle, P. E. (2014). Unregulated use of laptops over time in large lecture classes. *Computers & Education*, *78*, 78-86.

Saritepeci, M. (2020a). Developing Computational Thinking Skills of High School Students: Design-Based Learning Activities and Programming Tasks. *Asia-Pacific Education Researcher*, *29*(1), 35-54. https://doi.org/10.1007/s40299-019-00480-2

Saritepeci, M. (2020b). Predictors of Cyberloafing among High School Students: Unauthorized Access to School Network, Metacognitive Awareness and Smartphone Addiction. *Education and Information Technologies*, *25*(3), 2201-2219.

Saritepeci, M., & Çakır, H. (2019). The Effect of Digital Storytelling Activities Used in Social Studies Course on Student Engagement and Motivation. In L. W. Bailey (Ed.), *Educational Technology and the New World of Persistent Learning*. IGI Global.

Seçkin, Z., & Kerse, G. (2017). Üniversite öğrencilerinin sanal kaytarma davranışları ve bu davranışların çeşitli değişkenler açısından incelenmesi: ampirik bir araştırma [Cyberloafing behaviors of university students and an examination of such behaviors in view ofassortedvariables: an empirical research]. *Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi* [Journal of Aksaray University Faculty of Economics and Administrative Sciences], *9*(1), 89-110.

Sharma, S. (2020). I want it my way: Using consumerism and neutralization theory to understand students' cyberslacking behavior. *International Journal of Information Management*, *53*, 102131.

Sipior, J. C., & Ward, B. T. (2002). A strategic response to the broad spectrum of Internet abuse. *Information Systems Management*, *19*(4), 71-79.

Stanton, J. M. (2002). Company profile of the frequent Internet user. *Communications of the ACM*, *45*(1), 55-59.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (6 ed.). Pearson.

Taneja, A., Fiore, V., & Fischer, B. (2015). Cyber-slacking in the classroom: Potential for digital distraction in the new age. *Computers & Education*, *82*, 141-151.

Tanrıverdi, Ö., & Karaca, F. (2018). Investigating the Relationships between Adolescents' Levels of Cognitive Absorption and Cyberloafing Activities according to Demographic Characteristics.

Tindell, D. R., & Bohlander, R. W. (2012). The use and abuse of cell phones and text messaging in the classroom: A survey of college students. *College Teaching*, *60*(1), 1-9.

Toker, S., & Baturay, M. H. (2021). Factors affecting cyberloafing in computer laboratory teaching settings. *International Journal of Educational Technology in Higher Education*, *18*(1), 1-24.

Vitak, J., Crouse, J., & LaRose, R. (2011). Personal Internet use at work: Understanding cyberslacking. *Computers in Human Behavior*, *27*(5), 1751-1759.

We Are Social, H. (2021a). *Digital 2021*. https://wearesocial.com/digital-2020

We Are Social, H. (2021b). *Digital 2021: Turkey*. In Digital 2021. https://datareportal.com/reports/digital-2021-turkey

Wu, J., Mei, W., Liu, L., & Ugrin, J. C. (2020). The bright and dark sides of social cyberloafing: Effects on employee mental health in China. *Journal of business research*, *112*, 56-64.

Wu, J., Mei, W., & Ugrin, J. C. (2018). Student Cyberloafing In and Out of the Classroom in China and the Relationship with Student Performance. *Cyberpsychology, Behavior, and Social Networking*, *21*(3), 199-204.

Yaşar, S. (2013). *Üniversite öğrencilerinin denetim odağı ve bilgisayar laboratuvarına yönelik tutumlarının siberaylaklık davranışlarına etkisi* [The effects of students' locus of control and attitudes towards computer laboratory on their cyberloafing behaviour] (Master Thesis, Hacettepe University). Ankara.

Yildiz-Durak, H., & Saritepeci, M. (2019). Occupational burnout and cyberloafing among teachers: Analysis of personality traits, individual and occupational status variables as predictors. *The Social Science Journal*, *56*(1), 69-87.

Yildiz Durak, H. (2020). Cyberloafing in learning environments where online social networking sites are used as learning tools: Antecedents and consequences. *Journal of Educational Computing Research*, *58*(3), 539-569.

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: April 5, 2021
Accepted: June 14, 2021
http://dergipark.org.tr/rep

e-ISSN: 2602-3733

June 2021 ◆ 5(1) ◆ 53-70

Research Article

Published: 06.30.2021

An Explanatory Model of Test Anxiety: Psychological Resilience, Abuse, and Neglect

Hikmet Beyza Yakıcı[1]
Necmettin Erbakan University

Mehmet Kandemir[2]
Kırıkkale University

Abstract

The main objective of this study is to investigate the relationship between middle school students' test anxiety and their psychological resilience, neglect, and abuse experiences based on a model. Under this main objective, the sub-objectives of the study include determining the relationship between the nature of test anxiety and childhood experiences, identifying the mediating characteristics of psychological resilience in reducing the impact of childhood traumas, and examining the effect of psychological resilience on test anxiety. The study, which used the correlational survey model, was conducted with 433 middle school students. The Westside Test Anxiety Scale, the Resiliency Scale for Children and Adolescents, and the Childhood Trauma Questionnaire were employed as data collection tools in the study. The AMOS software package was used for the analysis of the hypothesis test model, and the relationships between variables were examined with path analysis. As a result of the study, the goodness of fit coefficients of the conceptual model analyzed indicated that the model was valid. Emotional neglect and emotional abuse, which are sub-dimensions of the trauma scale, were significant and negative predictors of psychological resilience. In addition, the results of the bootstrap analysis showed that psychological resilience had a full mediating role in the relationship between test anxiety and emotional abuse and neglect. According to the findings of the study, it was concluded that emotional abuse and neglect, which are the sub-dimensions of childhood trauma, were factors that negatively affected the psychological resilience of students and that the high psychological resilience levels of the students reduced test anxiety. Also, psychological resilience was found to be an important mediator in reducing the effect of the consequences of childhood trauma on test anxiety.

Key Words

Abuse • Neglect • Psychological resilience • Test anxiety

[1] **Correspondance to:** Ahmet Keleşoğlu Educational Faculty, Necmettin Erbakan University, Konya, Turkey. E-mail: pdbeyzayakici@gmail.com **ORCID:** 0000-0001-6940-1185
[2] Faculty of Education,Kırkkale University, Kırıkkale, Turkey. E-mail: mkandemir.tr@gmail.com **ORCID:** 0000-0002-5576-3537
Citation: Yakıcı, H. B., & Kandemir, M. (2021). An explanatory model of test anxiety: Psychological resilience, abuse, and neglect. *Research on Education and Psychology(REP)*, *5*(1), 53-70.

There are some universal factors that affect an individual's learning and achievement potential in the past and present and will continue to affect them in the future. One of these factors that significantly affects school life and draws researchers' attention is probably anxiety. Spielberger(1972), who had important studies on anxiety, described anxiety as a negative, emotional, and distinct response, such as sadness, restlessness, and tension caused by factors that lead to stress. Zeidnerand Matthews (2005), on the other hand, defined anxiety as the intense responses of the individual in the cognitive, affective, and physical sense to the perceived stressor. According to the literature, there are two basic types of anxiety: "state and trait" (Beck & Emery, 2005; Spielberger, 1975, 1980). Some individuals are consistently more anxious than other individuals, and this anxiety is defined as "trait anxiety" (Spielberger, 1975). Pintrich and Schunk (1996) evaluated trait anxiety as a personality trait rather than situation-specific phenomenon. According to Spielberger (1975), another anxiety that is experienced in certain situations and that many people in similar situations may experience is "state anxiety". Although the types of state and trait anxiety differ from each other, individuals with high trait anxiety are reported to experience state anxiety more (Spielberger, 1975). They experience this anxiety as test anxiety in cases when their performance expectations are at the highest level in their school life for the first time in an evident and concrete way. According to Spielberger and Vogg (1995), the most common test anxiety in the state anxiety group is an internal state that is experienced in a formal evaluation process and includes cognitive, affective, and behavioral properties that prevent the individual from maximizing their performance (Spielberger, 1995).

Test anxiety, which is an important phenomenon that must be dealt with for the academic and learning life of the student, is quite common. For example, Cassady (2010) determined that approximately 40% of the students experienced test anxiety. In a study conducted by Gençdoğan (2010), 66% of the students were found to experience a high level of test anxiety. In another study conducted by Kavakci, Semiz, Kartal, Dikici, and Kuğu (2014), a high level of test anxiety was found in 48% of the students. Test anxiety, which is widely observed in studies, can be said to be a barrier to students' development of a successful profile (Cassady, 2004). Cassady (2004) stated that students who experienced high levels of test anxiety did not prepare for exams adequately, could not include their cognitive competencies in the process, and as a result of these, experienced an intensely increased anxiety during tests. Hembree (1988) reported that a high level of test anxiety experienced by the student affected the success in each course at different levels. Similarly, Putwain, Woods, and Symes (2010) found that test anxiety negatively affected success. Spielberger (1995) stated that students perceived this situation as a problem and resorted to psychosocial support to overcome it. On the other hand, Kandemir (2012) stated that with the increase in test anxiety, students increasingly tended to procrastinate their duties in a dysfunctional way to get rid of these stressful situations. Test anxiety, which can be experienced at every stage of education, becomes apparent in adolescence (Zeidner, 1996). It can be said that the emotional burden and significance of the tests starting to increase especially towards the end of the secondary school years is important in revealing the anxiety experienced. Eighth grade (middle school) students in Turkey take the High School Entrance Test (LGS) at the end of the year and can choose a school that suits them according to their test score. However, during this period, students may have to both deal with problems of adolescence and cope with the expectations of the school and the family about the test and the high pressure related to it. They may experience test anxiety from the beginning of the middle school due to this test (Aydın &Bulgan, 2017). It is therefore important to understand the causes of anxiety to help students to cope with it.

The literature shows that test anxiety is associated with many factors, such as social expectation, study habits, personality traits, self, and self-efficacy beliefs (Elliot & McGregor, 1999; Kandemir, 2013). Psychological resilience, which is an important domain of positive psychology (Seligman & Csikszentmihalyi, 2000) that take potentials, strengths, and positive characteristics of individuals as a base, draws attention to the reasons for test anxiety (Jamshidi et al., 2017; Kaya et al., 2016). Psychological resilience comes from the Latin root "resiliens" and refers to the elasticity of a substance and its ability to easily return to its original. The positive psychology approach expresses psychological resilience as the strength of individuals who can recover and return to their normal lives (Doğan, 2015). Mangham, McGrath, Reid, and Stewart (1999) defined psychological resilience as the ability of individuals and systems (family, group, society) to cope effectively with significant adverse situations. Leipold and Greve (2009) and Murphy (1987), on the other hand, saw resilience as a bridge between development and coping. Similarly, Öğülmüş (2001) evaluated it as the capacity to become successful despite adversities (Öğülmüş, 2001).

The diversity of definitions of psychological resilience has also been manifested in the dimensions of the concept. There are three dimensions of the concept of psychological resilience: risk or difficulty, protective factors, and positive adaptation (Gizir, 2007). Risk factors are known as negative factors in a person's life as individual, familial, or environmental risk factors (Armstrong et al., 2005; Karaırmak, 2006). Protective factors, on the other hand, can be intrinsic and extrinsic, and they are considered as factors that reduce the negative impact that occurs in dangerous situations. Protective factors can be individual, family-related, and outside the family (Karaırmak, 2006). Positive adaptation is the ability to cope with dangerous situations by using protective factors that one has (Ülker-Tümlü&Recepoğlu, 2013). Positive adaptation factors include academic success, social competence, positive social relationship, and psychosocial adaptation (Gizir, 2007).

There are some studies on the relationship between resilience, which has different dimensions and grants the potential to recover even in case of failure, and test anxiety (Jamshidi et al., 2017; Kaya et al., 2016). In the study conducted with 344 middle school students, a positive relationship was found between achievement anxiety and psychological resilience (Kaya et al., 2016). Accordingly, it can be concluded that as psychological resilience increases, test anxiety decreases (Totan et al., 2019). In addition to these explanations, Hjemdal, Vogel, Solem, Hagen, and Stiles (2011) stated that individuals have coping skills that they can use in risky and negative situations, that is, their thoughts about psychological resilience will help them experience anxiety and depression less. Psychological resilience can be a protective factor on the individual to bring the test anxiety to a normal level. It has been seen in the literature that childhood traumatic experiences, like psychological resilience, are a variable that can help explain anxiety (Demir et al., 2020).

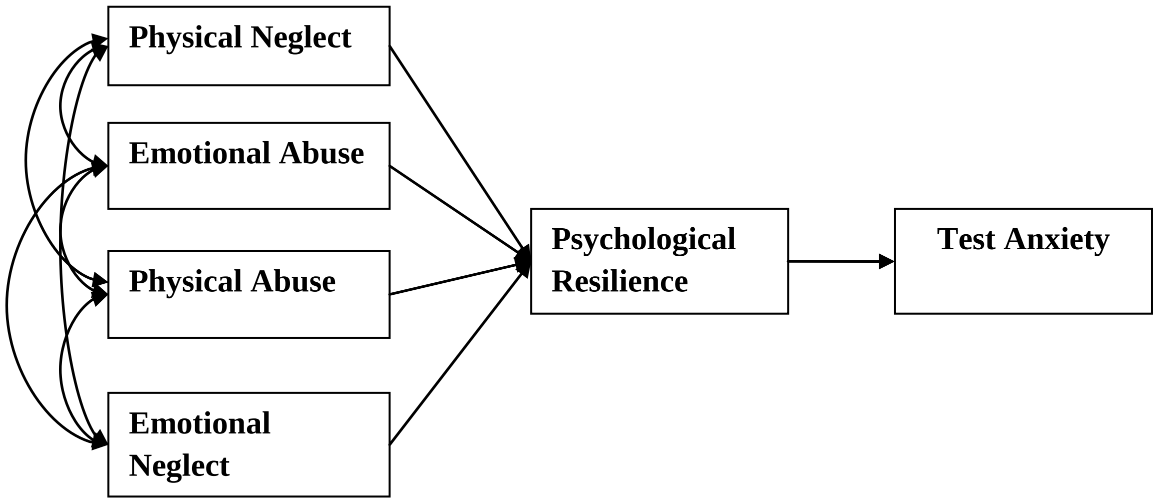
Childhood traumatic experiences, which is an important variable in this study that focuses on explaining test anxiety, is a comprehensive term that includes many negative experiences. The traumatic experiences that the child can experience in the early period and cause negative consequences may include death, natural disasters, and pandemic diseases, as well as violence, abuse, and neglect (Şar et al., 2012). Childhood traumas are examined in two sub-domains: neglect and abuse. According to the definition made by the World Health Organization in 1985, behaviors that affect the child's health negatively in physical, psychological, and social terms and are exerted intentionally or unintentionally by an adult, society, or peers of the child, are considered as abuse and neglect (WHO, 1985). According to the Turkish Language Association (TLA), abuse is defined as the exploitation of a person's goodwill, and neglect, on the other hand, as failing to give the proper attention or evading. Whether the behavior of parents towards their children is neglect or abuse depends on the values that society attaches to the child, beliefs, the method of punishment and discipline towards the child, and the type of behaviors that are considered unacceptable towards the child (Zeytinoğlu, 1991). Children who have been exposed to neglect and abuse during childhood are greatly likely to use these behaviors as a problem-solving method in their future lives (Güler et al., 2002). Childhood abuse and neglect can cause mental problems that can be seen in adulthood and are seen as an important risk factor in the emergence of anxiety symptoms and disorders (Gibb et al., 2007; Spinhoven et al., 2010). In a study conducted by Öztep (2010), the anxiety scores of adolescents who were exposed to emotional abuse were reported to be higher than those who were not. In the study reported by Spinhoven et al. (2010), it was reported that traumatic experiences in early childhood were a profound cause of problems such as anxiety and depression.

In the study, the relationships between psychological resilience, which is used to explain test anxiety, and childhood traumatic experiences draw attention in the related literature (Bindal, 2018; Masten & Narayan, 2012; Masten & Osofsky, 2010; Reuther & Osofsky, 2013). In their study, Sapienza and Masten (2011) reported that children with high levels of psychological resilience coped more easily with childhood traumas and were less affected by their traumas. In a different study reported by Bindal (2018), a negative relationship was found between psychological resilience and emotional abuse, emotional neglect, and physical neglect, but there was no significant relationship with the physical abuse dimension. In a study conducted on prospective teachers, it was observed that individuals who experienced trauma in childhood had significantly lower psychological resilience compared to those who did not (Balcı, 2018). In a study conducted with adults, a significant negative relationship was found between emotional neglect, physical neglect, emotional abuse, and physical abuse and psychological resilience (Aydın, 2018).

In general, the examination of related studies indicates that there is a relationship between psychological resilience, neglect, and abuse, which are predictor variables of test anxiety. However, no studies that investigate the variables of test anxiety, psychological resilience, and childhood trauma together have been found. Nor have studies into the mediating function of psychological resilience in reducing the effect of traumatic experiences in childhood on test anxiety been encountered. The main purpose of this study is to examine the predictive power of psychological resilience, neglect, and abuse on test anxiety. Accordingly, the researchers aim to determine the relationship between the nature of test anxiety and childhood experiences and to identify the mediation characteristics of psychological resilience in reducing the effects of childhood traumas. Another aim of the study is to examine the effect of psychological resilience on test anxiety. In this context, the conceptual model created by examining the literature on research variables is given below.

Figure 1

Conceptual Model



At the same time, students experience a national-scale achievement test in their school life for the first time in the 8th grade (middle school). Therefore, this may be the first time that they experience test and performance anxiety intensely. For this reason, this research, which was conducted at the middle school level, can make important contributions to the understanding of the nature and causes of anxiety experienced by students

Method

The methods part of the research presents information about the research model, study group, data collection tools, data collection process, and data analysis.

Research Model

This study used the correlational survey model, which is a subtype of quantitative research design. Quantitative research design aims to collect data to determine certain characteristics of a certain group of individuals (Büyüköztürk et al., 2018). The correlational survey model is defined as a research method that aims to determine the existence and/or degree of variance between two or more variables (Cohen et al., 2000). In the study, a conceptual model was proposed to determine the extent to which students' childhood traumas and psychological resilience levels together predicted test anxiety, and the results of the analysis of the proposed model in the final model were given. At the same time, the study aimed to determine how test anxiety was predicted along with the direct and indirect relationships of the variables. When considered in the context of these explanations, it can be said that the model of the research is the correlational survey model.

Study Group

The study data were collected from a total of 433 (305 girls, 128 boys) students. The study group consisted of 5th (24), 6th (67), 7th (22), and 8th–grade (320) middle school students. Participants' ages ranged from 10 to 16 (mean age=12.83). The number of siblings of the participants varied between 1 and 10 (mean=3). Their grade point average ranged between 30 and 99 (mean = 77.5). The number of days that the participants were absent from school varied between 0 and 18 (mean = 2.6). Participants were found to study between 0 and 7 hours a day (mean = 2.3). While 226 (52.2%) of them had a daily study plan, 207 (47.8) did not have a study schedule.

Measurement Tools

The Westside Test Anxiety Scale

This scale was developed by Driscoll (2007) to measure the efficiency of the programs for test anxiety and to determine the test anxiety level of individuals. It consists of a single factor and 10 items. It was adapted to Turkish culture by Totan and Yavuz (2009). The adapted version consists of 11 items. It uses a 5-point Likert-type scale. Scores that can be obtained from the scale range between 11 and 55. There are no reversed items on the scale. The adapted version of the scale consists of a single factor, too. The construct validity of the scale was established by explanatory factor analysis and confirmatory factor analysis. Cronbach's alpha internal consistency coefficient of the scale was .89 and was found satisfactory. In the descriptive factor analysis, the explained variance of the scale was found as 46.05%. The scale has a one-dimensional structure with factor loadings ranging between .32 and .78. The test-retest validity of the scale was found as .57, and the item-total correlations varied between .47 and .71. Cronbach's alpha value in this study was found as .79. When the studies were examined, it was seen that the scale was applied on secondary school students (Başol, Zabun, 2014; Totan, 2018).

The Childhood Trauma Questionnaire

The original form of the Childhood Trauma Questionnaire was developed by Bernstein, Fink, Handelsman, Foote, Lovejoy, and Wenzel (1994) and adapted to Turkish culture by Şar et al. (2012). The scale consists of 28 items and 5 sub-dimensions, namely, physical abuse, sexual abuse, emotional abuse, emotional neglect, and physical neglect. It uses a 5-point Likert-type scale. There are reversed items on the scale. Cronbach's alpha value, which demonstrates the internal consistency of the scales, was found as 0.93, and the Guttman split-half test coefficient was 0.97. The test-retest correlation coefficient of the total score of the scale was found to be 0.90 ($p <.01$ $N = 48$). This study did not use the sexual abuse sub-dimension. Cronbach's alpha value for this research was found as .87. When the studies were examined, it was seen that the scale was applied on secondary school students (Bindal, 2018).

The Child and Youth Resilience Measure

This scale was developed by Liebenberg, Ungar, and Van de Vijver (2012). It has 28 items and 3 subscales. The short-form study of the scale was conducted by Liebenberg, Ungar, and LeBlanc (2013). As a result of two different studies, a 12-item structure was obtained. The scale was adapted to the Turkish Culture by Arslan (2015). The adapted version of the scale consists of 12 items and a single factor. It uses a 5-point Likert-type scale. Cronbach's alpha value of the scale was calculated as .91. Item-total correlation values varied between .43 and .65. Internal consistency coefficients of the subscales varied between .80 and .82. Cronbach's alpha value for this study was found as .85. The scale's study group has the same age as this study group.

Data collection process and preparation of data for analysis

Before the data collection process of the research was initiated, the proposal of the research and the data collection tools were presented to the Social and Human Sciences Ethics Committee of Kırıkkale University, and the necessary legal approval of the research was obtained from this committee. Afterward, the data collection process was initiated.

Before collecting data from middle school students in the study, they were informed about the general objectives of the research, data collection tools, and the average duration of the implementation. It was observed that the research group completed filling out the scales within an average of 20 minutes. After the collected data were entered into the database of the IBM SPSS software package, some preliminary assessments were made to prepare the data for analysis. The frequency distributions of the research data were examined. Then, Mahalanobis distances of the data obtained from each psychological counselor were examined, and accordingly, data of 31 students showing a Mahalanobis result of greater than the value of chi-square as much as the number of independent variables used in the related hypothesis model to determine the significance value at the level of .01 were removed from the data analysis set. Skewness and kurtosis values were examined for the normality of the dependent variable for unidimensional and multidimensional cases before the regression analysis such as path analysis. It was found that skewness and kurtosis values were between ± 1.0 (Skewness = .053, Kurtosis = -.689). If the coefficients of skewness and kurtosis are in the range of ± 1.0, the distribution can be accepted to be normal (George & Mallery, 2019).

Findings

In this part of the study, middle school students' test anxiety was predicted using psychological resilience, abuse, and neglect variables within the scope of a model. Also, descriptive analyses of the variables, correlation analysis between variables, and the analysis results of the tested conceptual model were presented. First of all, descriptive results that were obtained from test anxiety, psychological resilience, and childhood trauma scales, and correlations between variables were examined. The results are shown in Table 1 below.

Table 1

Results of The Correlation Analysis between Variables

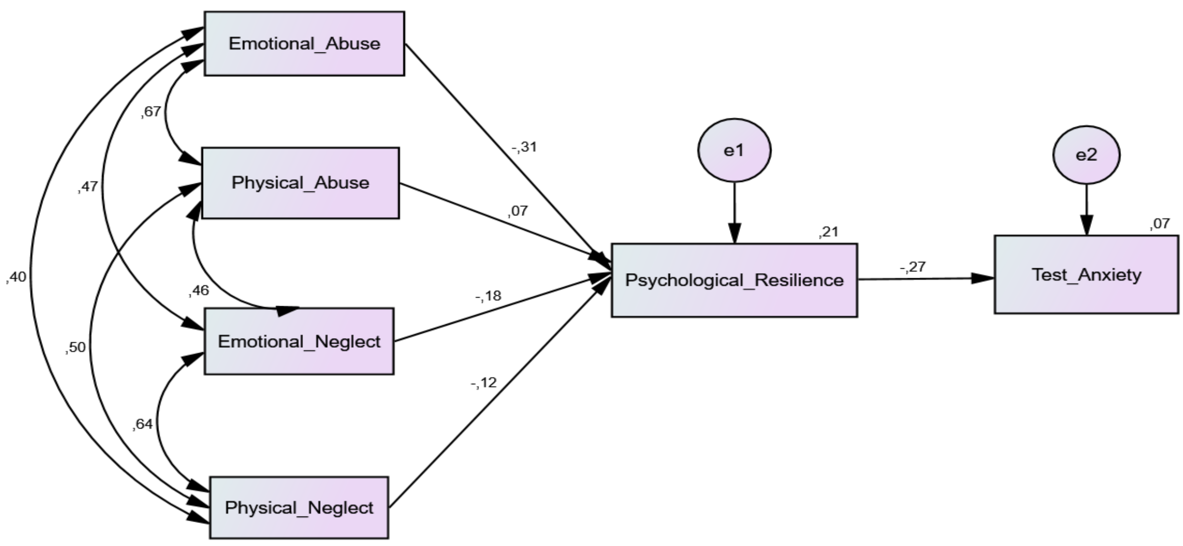
Variables	$\overline{X}$	Sd	1	2	3	4	5	6
1. Test Anxiety	2.92	.75	1					
2. Psychological Resilience	1.46	.70	-.27**	1				
3. Emotional Abuse	1.24	.70	.16**	-.40**	1			
4. Physical Abuse	1.87	.95	.10*	-.28**	.67**	1		
5. Emotional Neglect	1.32	.47	.13**	-.37**	.47**	.46**	1	
6. Physical Neglect	4.15	.68	.12*	-.33**	.40**	.50**	.64**	1

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

As seen in Table 1, there were significant relationships between test anxiety and related variables. Accordingly, the test anxiety of middle school students had a negative, low, significant correlation with psychological resilience (r = -. 27), a positive, low, significant correlation with emotional abuse (r = . 16), a positive, low, significant correlation with physical abuse (r = .10), a positive, low, significant correlation with emotional neglect (r = .13), and a positive, low, significant correlation with physical neglect (r = .12). According to these results, it is possible to say that there were positive or negative significant relationships between the test anxiety levels of middle school students and the predictor and mediator variables of the research and that the correlation competence required for the model test was achieved. Then, the process of testing the conceptual model was initiated. The results of the path analysis conducted to test the conceptual model are given in Figure 2 below.

Figure 2

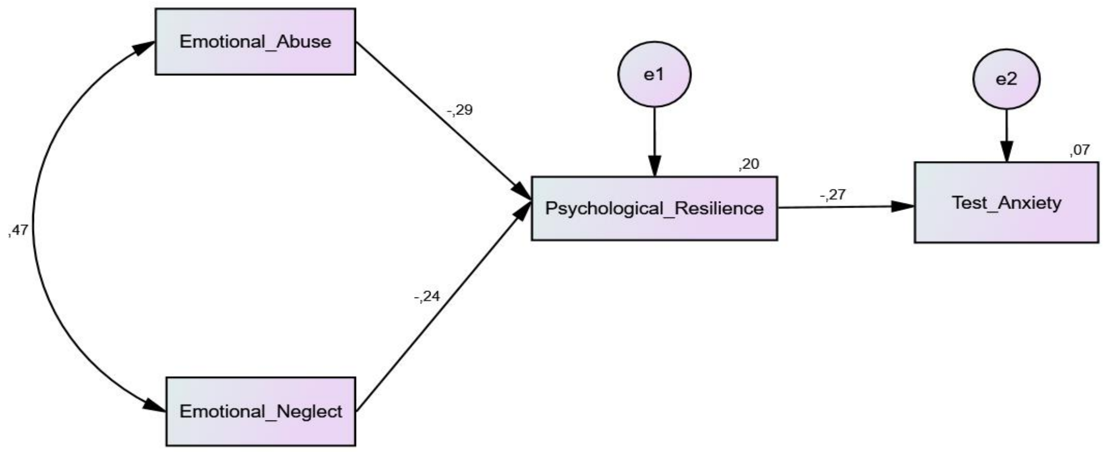
Results of The Analysis of The Model Created for Test Anxiety



In the path analysis model, which examined the relationships between test anxiety, psychological resilience, and childhood traumas, variables formed the observed variables, and the model was analyzed accordingly. While evaluating the general fit of the model, the chi-square test showed the fit of the research result with the data obtained. For this reason, the *p* value of chi-square should not be significant. As a result of this study, the chi-square value was not found to be significant (Schumacker & Lomax, 2010). For this reason, it can be said that the model was consistent with the data. When the impact coefficients of the tested model were examined, it was found that the level of physical abuse predicted the level of psychological resilience (β = .07, t = .1.151, *p*> .05) insignificantly and that the level of physical neglect predicted psychological resilience at a low level (β = -. 12, t = -2.064 , p <.05). Accordingly, the model was retested by removing the predictive relationship between physical neglect and abuse and psychological resilience in the hypothesis test model. Standardized coefficients for the final results are given in Figure 3.

Figure 3

Results of The Analysis of The Final Model Created for Test Anxiety



Fit indices of the model established between childhood traumas, psychological resilience, and test anxiety were found as follows: $\chi 2$ / df (chi-square) = .81, p> .05; CFI (Comparative Fit Index) = 1.00; NFI (Normed Fit Index) = .99; TLI (Tucker-Lewis Index) = 1.00; RMSEA (Root-Mean-Square Error of Approximation) = .00; SRMR (Standardized Root Mean-Square Residual) = .02. $\chi 2$ / sd, RMSEA, and SRMR values of less than .05 and CFI, NFI, TLI, and RFI fit values of greater than .95 mean that the tested hypothesis model is perfect (Şimşek, 2007).

Table 2

Fit Indices Obtained for The Tested Model

Model fit indices	Model fit values	Fit values	
		Acceptable	Good / Very good
X^2/sd	.80	$0<X^2/sd<5$	$0<X^2/sd<3$
CFI	1.00	.90≤CFI≤1.00	.95≤CFI≤1.00
NFI	.99	.90≤NFI≤1.00	.95≤NFI≤1.00
TLI	1.00	.90≤TLI≤1.00	.95≤TLI≤1.00
RFI	.98	.90≤TLI≤1.00	.95≤TLI≤1.00
RMSEA	.00	.00≤ RMSEA≤.08	.00≤ RMSEA≤.05
SRMR	.02	.00≤ SRMR ≤.08	.00≤ SRMR ≤.05

CFI: Comparative Fit Index, NFI: Normed Fit Index, TLI: Tucker-Lewis Index, RMSEA: Root-Mean-Square Error of Approximation, SRMR: Standardized Root Mean-Square Residual

Table 3

Effect Values of Predictive Variables on Predicted Variables

	Emotional Abuse			Emotional Neglect			Psychological Resilience		
	1	2	3	1	2	3	1	2	3
Psychological resilience	-.29	-	-.29	-.24	-	-.24	-	-	-
Test anxiety	-	.08	.08	-	.06	.06	-.27	-	-.27

1: Direct effects; 2: Indirect effects; 3: Total effects

The results in Table 3 obtained for direct effects from the model test established for the prediction of test anxiety levels of middle school students indicated that psychological resilience predicted test anxiety significantly and negatively (β = -. 27, t = -5.74, p <.001). Emotional neglect (β = -. 24, t = -4.87, p <.001), emotional abuse (β = -. 29, t = -5.91, p <.001), which are sub-dimensions of the trauma scale, predicted psychological resilience significantly and negatively. The indirect effect of the sub-dimensions of the trauma scale on test anxiety through the mediation of psychological resilience was found to come from emotional neglect (β = .06, p <.001), and emotional abuse (β = .07, p <.001), and the results of the Boostrap analysis showed that psychological resilience had a full mediation role in the relationship between test anxiety and emotional abuse and neglect (95% GA [-. 34, -.16]). When full mediation is in question, it is expected that the relationship between the dependent or independent variable weakens or becomes statistically insignificant when the mediator variable is added to the analysis (Kline, 2018). In line with this information, psychological resilience was found to play a full mediator variable role between test anxiety and emotional abuse and emotional neglect.

Discussion, Conclusions, and Recommendations

This study aimed to examine the predictive relationships between childhood traumas, psychological resilience, and test anxiety. The study also aimed to investigate the mediating role of psychological resilience in the relationship between childhood traumas and test anxiety. The results of correlation analyses showing the relationships between childhood traumas, psychological resilience, and test anxiety revealed that there was a negative relationship between test anxiety and psychological resilience, and a positive significant relationship between emotional abuse, physical abuse, emotional neglect, and physical neglect, which are sub-dimensions of childhood trauma. A negative significant relationship was found between psychological resilience and emotional abuse, physical abuse, emotional neglect, and physical neglect, which are the sub-dimensions of childhood trauma.

According to the findings of the study, a significant negative correlation was found between test anxiety and psychological resilience. In other words, as the psychological resilience levels of the students decreased, their test anxiety levels increased. The examination of the related literature indicated that there were studies supporting findings similar to those of the current study (De La Fuente et al., 2017; Totan et al., 2019; Trigueroset al., 2020; Jamshidi et al., 2017). According to the structural equation model established by Totan et al. (2019) on university students, it was found that psychological resilience negatively predicted test anxiety. Likewise, in the structural equation model established by Trigueros et al. (2020), it was found that psychological resilience negatively predicted test anxiety. In addition, according to the path analysis model established by Jamshidi et al. (2017), psychological resilience was determiend to negatively predict test anxiety. The results of these models in the literature were found to be consistent with the findings of the present study that psychological resilience negatively predicted test anxiety. In other words, as the level of psychological resilience increased, test anxiety decreased. According to this finding, it can be said that the high level of psychological resilience is a protective factor for the individual in terms of a lower level of test anxiety. Individuals with a high level of psychological resilience have internal and external resources, such as self-efficacy, internal discipline, awareness, autonomy, social competence, and perceived support, which may have increased students' beliefs in coping with test anxiety, thus reducing their test anxiety.

Another finding of the study was that there was a positive significant relationship between test anxiety and the sub-dimensions of childhood traumas, namely, emotional abuse, physical abuse, emotional neglect, and physical neglect. In other words, exposure to childhood traumas increased students' test anxiety levels. In the literature, although there are studies investigating the relationship between test anxiety and childhood traumatic experiences, some studies show a positive relationship between anxiety and childhood traumas (Huh et al., 2017). For example, Gibb et al. (2007) reported that traumatic experiences in childhood had a predictive effect on anxiety disorders in adulthood. Similar results were obtained in the study of Huh et al. (2017). Krause, Mendelson, and Lynch (2003) stated that maladjustment caused by traumatic experiences in early life would make the person vulnerable in various psychopathological situations. In this context, the maladjustment and inadequacies that occur along with emotional neglect and abuse can make the person vulnerable to the pressure, strain, and emotional coping that would only be caused by the national-level tests. Therefore, it is possible that students with such a childhood background can experience test anxiety.

The study also found that there was a significant negative relationship between psychological resilience and emotional abuse, physical abuse, emotional neglect, and physical neglect, which are the sub-dimensions of childhood trauma. In other words, increased exposure to traumas in childhood decreased the psychological resilience of the students. There are studies supporting these findings of the study in the related literature (Carli et al., 2013; Sexton et al., 2015). For example, in a structural equation model study conducted by Arslan and Balkıs (2016) on adolescents, it was found that emotional abuse negatively predicted psychological resilience. In the study conducted by Kanak and Arslan (2018), a negative relationship was found between emotional abuse and psychological resilience. In the path analysis model established by Lee, Bae, Rim, Lee, Chang, Kim, and Won (2018), it was found that emotional neglect negatively predicted psychological resilience. These findings were consistent with the findings of the present study that revealed emotional abuse and neglect negatively predicted psychological resilience. In a study conducted by Feldman and Vengrober (2011) on children who were exposed to war between the ages of 1.5 and 5, it was found that children who did not show post-traumatic stress disorder had stronger psychological resilience and that children with high psychological resilience were observed to receive social support from their mothers more. In other words, children who have psychological resilience cope more strongly with their stress experiences, and it can be said according to these results that children whose social support needs are met and not exposed to neglect and abuse by their parents feel more resistant to difficult life events.

According to the results of the study, it can be said that it is important to prepare and implement programs and activities to increase the psychological resilience of children who have test anxiety. At the same time, preparing and implementing post-traumatic growth programs aiming to strengthen the psychological resilience of children living in social welfare hostels and similar places will help children to cope with negative emotions such as anxiety and fear that may be experienced in the future. It can be said that the lack of research into how test anxiety is affected by experiences such as emotional neglect and abuse and the lack of studies on the functionality of the resilience variable in the process affects the depth of the discussion in this research to a certain extent. Especially, how children who experience trauma gain psychological resilience skills according to their age and how protective processes against risk behaviors are included in the system should be investigated longitudinally. When concepts, such as attachment styles, perceived social support, and coping with stress, that will help gain different perspectives are tested in similar models, the results can provide better support for understanding the results of this study.

References

Armstrong, M. I., Birnie-Lefcovitch, S., & Ungar, M. T. (2005). Pathways between social support, family well being, quality of parenting, and child resilience: What we know. *Journal of child and family studies*, *14*(2), 269-281.

Arslan, G., & Balkıs, M. (2016). Ergenlerde duygusal istismar, problem davranışlar, öz-yeterlik ve psikolojik sağlamlık arasındaki ilişki. [The Relationship Between Emotional Maltreatment, Problem Behaviors, Psychological Resilience, and SelfEfficacy in Adolescents] *Sakarya University Journal of Education*, *6*(1), 8-22. https://doi.org/10.19126/suje.35977

Arslan, G. (2015). Çocuk ve Genç Psikolojik Sağlamlık Ölçeği'nin (ÇGPSÖ) psikometrik özellikleri: Geçerlilik ve güvenirlik çalışması. [Psychometric Properties of Child and Youth Resilience Measure (CYRM-12): The Study of Reliability and Validity] *Ege Eğitim Dergisi*, *16*(1), 1-12.

Aydin, U., & Bulgan, G. (2017). Çocuklarda Sınav Kaygısı Ölçeği'nin Türkce uyarlaması [Adaptation of Children's Test Anxiety Scale to Turkish]. *İlköğretim Online [Elementary Education Online]*, *16*(2), 887-899.

Aydın, E. (2018). *Çocukluk çağı travmatik yaşantılarının psikolojik sağlamlık ve depresyon belirtileri üzerine etkisi* [The Effect Of Childhood Traumatic Experiences On Resilience And Depression Symptoms] Fatih Sultan Mehmet Vakıf Üniversitesi, Sosyal Bilimler Enstitüsü.

Balcı, İ. (2018). *Çocukluk çağı travmaları ile baş etme yönelimli psiko-eğitim programının psikolojik sağlamlık üzerindeki etkisi* [The Impact of Coping with Childhood Traumas Oriented Psycho-Education Program on Resilience] Lisansüstü Eğitim Enstitüsü (Eğitim Bilimleri).

Başol, G., & Zabun, E. (2014). Seviye belirleme sınavında başarının yordayıcılarının incelenmesi: Dershaneye gitme, mükemmeliyetçilik, ana-baba tutumu ve sınav kaygısı. [The Predictors of Success in Turkish High School Placement Exams: Exam Prep Courses, Perfectionism, Parental Attitudes and Test Anxiety] *Kuram ve Uygulamada Eğitim Bilimleri Dergisi*,[*Educational Sciences: Theory & Practice]14*(1), 63-87.

Beck, A. T., & Emery, G. (2005). *A cognitive perspective on anxiety disorders and phobias*. Trans. Contact Veysel directly: Litera Publishing.

Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., Sapareto, E., & Ruggiero, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American journal of psychiatry*.

Bindal, G. (2018). *Ergenlerin psikolojik sağlamlığın (resilience), çocukluk çağındaki travma ve bağlanma stilleri ile ilişkisinin incelenmesi* [The analysis of the relationship between the resilience of adolescents and trauma in childhood or attachment styles] Hasan Kalyoncu Üniversitesi.

Büyüköztürk, Ş., Akgün, Ö. E., Demirel, F., Karadeniz, Ş., & Çakmak, E. K. (2015). Bilimsel araştırma yöntemleri [Scientific research methods]. Ankara, Turkey: Pegem.

Carli, V., Mandelli, L., Zaninotto, L., Alberti, S., Roy, A., Serretti, A., & Sarchiapone, M. (2014). Trait-aggressiveness and impulsivity: Role of psychological resilience and childhood trauma in a sample of male prisoners. *Nordic journal of psychiatry*, *68*(1), 8-17.

Cassady, J. C. (2004). Theimpact of cognitive test anxiety on text comprehension and recall in the absence of external evaluative pressure. *Applied Cognitive Psychology*, *18*(3), 311–325. https://doi.org/10.1002/acp.968

Cassady, J. C. (2010). *Anxiety in schools: The causes, consequences and solutions for academic anxieties.* Peter Lang.

Cohen, L., Manion, L., &Morrison K. (2000). *Researchmethods in education* (5th Edition). Routledge Falmer.

De La Fuente, J., López-García, M., Mariano-Vera, M., Martínez-Vicente, J. M., &Zapata, L. (2017). Personal self-regulation, learning approaches, resilienc eand test anxiety in psychology students. *Estudios Sobre Educación*, *32*, 9-26.

Demir, Z., Böge, K., Fan, Y., Hartling, C., Harb, M. R., Hahn, E., Seybold, J., & Bajbouj, M. (2020). The role of emotion regulation as a mediator between early life stress and posttraumatic stress disorder, depression and anxiety in Syrian refugees. *Translational Psychiatry*, *10*(1), 1-10. https://doi.org/10.1038/s41398-020-01062-3

Doğan, T. (2015). Kısa psikolojik sağlamlık ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. [Adaptation of the Brief Resilience Scale into Turkish: A validity and reliability study] *The Journal of Happiness & Well-Being*, *3*(1), 93-102.

Driscoll, J. (2007). Practising Clinical Supervision: A Reflective Approach, Bailliere Tindall.

Elliot, A. J., & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and social Psychology*, *76*(4), 628.

Feldman, R., & Vengrober, A. (2011). Posttraumatic stress disorder in infants and young children exposed to war-related trauma. *Journal of the American Academy of Child & Adolescent Psychiatry*, *50*(7), 645-658.

Gençdoğan, B. (2010). Lise öğrencilerinin sınav kaygisi ile boyun eğicilik düzeyleri ve sosyal destek algisi arasindaki ilişkiler. *Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *7*(1), 153-164.

George, D.,&Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simpleguideandreference*. Routledge.

Gibb, B. E., Chelminski, I., & Zimmerman, M. (2007). Childhood emotional, physical, and sexual abuse, and diagnoses of depressive and anxiety disorders in adult psychiatric outpatients. *Depression and anxiety*, *24*(4), 256-263.

Gizir, C. (2007). Psikolojik sağlamlık, risk faktörleri ve koruyucu faktörler üzerine bir derleme çalışması. [A literature review of studies on resilience, risk, and protective factors] *Türk Psikolojik Danışma ve Rehberlik Dergisi*,[*Turkish Psychological Counseling and Guidance Journal]* *3*(28), 113-128.

Güler, N., Uzun, S., Boztaş, Z., & Aydoğan, S. (2002). Anneleri tarafından çocuklara uygulanan duygusal ve fiziksel istismar/ihmal davranışı ve bunu etkileyen faktörler [The behaviours of mothers who perform physical or emotional abuse/neglect of their children]. *Cumhuriyet Üniversitesi Tıp Fakültesi Dergisi* [Cumhuriyet Medical Journal], *24*(3), 128-134.

Hembree, R. (1988). Correlates, causes, effects, andtreatment of test anxiety. *Review of EducationalResearch, 58*, 47-77.

Hjemdal, O., Vogel, P. A., Solem, S., Hagen, K., &Stiles, T. C. (2011). The relation ship between resilience and levels of anxiety, depression, andobsessive-compulsive symptoms in adolescents. *Clinical Psychology & Psychotherapy, 18*, 314-321. https://doi.org/10.1002/cpp.719

Huh, H. J., Kim, K. H., Lee, H. K., &Chae, J. H. (2017). The relation ship between childhood trauma and the severity of adulthood depression and anxiety symptoms in a clinical sample: The mediating role of cogniti ve emotion regulation strategies. *Journal of Affective Disorders*, *213*, 44-50. https://doi.org/10.1016/j.jad.2017.02.009

Jamshidi, M. A., Moghadam, M. F., Ghorbani, S., &Farhoush, M. (2017). Self-efficacy and resilience as mediators in therelationship between test anxiety and spiritualintelligence among high school students in Qom. *J ResReligHeal*, *4*, 7-21.

Kanak, M., & Arslan, A. D. (2018). A Study of the Relationship Between the Level of Emotional Abuse Perceived by High School Students and their Levels of Psychological Resilience. *Sakarya University Journal of Education*, *8*(2), 187-201.

Kandemir, M. (2012). Öğrencilerinin akademik erteleme davranıslarının, kaygı, basarısızlık korkusu, benlik saygısı ve basarı amaçları ile açıklanması [Explanation of students' academic procrastination behaviors with, anxiety, fear of failure, self-esteem and achievement goals]. *Pegem Eğitim ve Öğretim Dergisi* [Pegem Journal of Education and Instructıon], *2*(4), 81-88.

Kandemir, M. (2013). A model explaınıng test anxıety: perfectıonıst personalıty traıts and performance achıevement goals. *International Journal of Academic Research*, *5*(5).

Karaırmak, Ö. (2006). Psikolojik sağlamlık, risk faktörleri ve koruyucu faktörler [Resilience, risk and protective factors]. *Türk Psikolojik Danışma ve Rehberlik Dergisi* [Turkish Psychological Counseling and Guidance Journal], *3*(26), 129-142.

Kavakci, O., Semiz, M., Kartal, A., Dikici, A., & Kugu, N. (2014). Test anxiety prevalance and related variables in the students who are going to take the university entrance examination. *Dusunen Adam The Journal of Psychiatry and Neurological Sciences*, *27*(4), 301.

Kaya, F., Peker, A., & Gündüz, B. (2016). Ortaokul öğrencilerinin psikolojik sağlamlığının eğitim stresi açısından incelenmesi.[Examination of relationship between psychological resilience and educational stress of secondary school students] *Journal of Bayburt Education Faculty*, *11*(2).

Kline, R.B. (2018). *Yapısal eşitlik modellemesinin ilkeleri ve uygulamaları*. Principles and Practice of Structural Equation Modeling] (Çeviri Editörü. Sedat Şen.). Nobel Yayıncılık.

Krause, E. D., Mendelson, T., & Lynch, T. R. (2003). Childhood emotional in validation and adult psychological distress: The mediating role of emotion al inhibition. *Child Abuse &Neglect*, *27*, 199-213.

Lee, S. W., Bae, G. Y., Rim, H.-D., Lee, S. J., Chang, S. M., Kim, B.-S., & Won, S. (2018). Mediating effect of resilience on the association between emotional neglect and depressive symptoms. *Psychiatry investigation*, *15*(1), 62.

Leipold, B.,& Greve, W. (2009). Resilience: A conceptualbridgebetweencopinganddevelopment. *European Psychologist*, *14*(1), 40-50.

Liebenberg, L., Ungar, M., &LeBlanc, J. C. (2013). The CYRM-12: a briefmeasure of resilience. *Canadianjournal of publichealth = Revuecanadienne de santepublique, 104(2*), 131-5

Liebenberg, L., Ungar, M., & Vijver, F. V. d. (2012). Validation of the child and youth resilience measure-28 (CYRM-28) among Canadian youth. *Research on social work practice*, *22*(2), 219-226.

Mangham, C.,Mcgrath, P., Reid, G., & Stewart, M. (1999). *Resiliency: relevance to health promotion detailed analysis.*Dalhousie University: Atlantic Health Promotion Research Centre.

Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war, and terrorism: Pathways of risk and resilience. *Annual review of psychology*, *63*, 227-257.

Masten, A. S., & Osofsky, J. D. (2010). Disasters and their impact on child development: Introduction to the special section. *Child development*, *81*(4), 1029-1039.

Murphy, L. (1987). Further reflections on resilience.(Ed: EJ Anthony ve BJ Cohler) The Invulnerable Child. In: New York: The Guilford Press.

Öğülmüş, S. (2001). Bir kişilik özelliği olarak yılmazlık. I. *Ulusal Çocuk ve Suç Sempozyumu: Nedenler ve Önleme Çalışmaları, Ankara (29-30 Mart).*

Öztep, İ. C. (2010). *Duygusal istismar algılayan ve algılamayan ergenlerin kaygı düzeyleri ve denetim odaklarının karşılaştırılması* Maltepe Üniversitesi, Sosyal Bilimler Enstitüsü].

Pintrich, P. R.,&Schunk, D. H. (1996). *Motivation in education: Theory, research, andapplications*. Merrill, EnglewoodCliffs, NJ.

Putwain, D. W., Woods, K. A., &Symes, W. (2010). Personal and situational predictors of test anxiety of students in post-compulsory education. *BritishJ ournal of Educational Psychology*, *80*(1), 137–160. https://doi.org/10.1348/000709909X466082

Reuther, E. T.,&Osofsky, J. D. (2013). Resilience after trauma in early development. *Encyclopedia on Early Childhood Development*: CEED/SKC-ECD.

Sapienza, J. K., & Masten, A. S. (2011). Understanding and promoting resilience in children and youth. *Current opinion in Psychiatry*, *24*(4), 267-273.

Schumacker, R. E.,&Lomax, R. G. (2010). *A beginners guide to structural equation modeling*. New York: Routledge.

Seligman, M.E.,&Csikszentmihalyi, M. (2000). Positivepsychology: An introduction. *AmericanPsychologist, 55*, 5–14.

Sexton, M. B., Hamilton, L., McGinnis, E. W., Rosenblum, K. L., &Muzik, M. (2015). The roles of resilience and childhood trauman history: main and moderating effects on post partum maternal mental health and functioning. *Journal of Affective Disorders*, *174*, 562-568. https://doi.org/10.1016/j.jad.2014.12.036

Spielberger, C. D. (1972). *Anxiety: Currenttrends in theoryand research*. AcademicPress.

Spielberger, C. D. (1975). Anxiety: state-trait-process. In C. D. Spielberger, & I. G. Sarason (Eds.), Stress and anxiety. Hemisphere/Wiley

Spielberger, C. D. (1980). *Test anxietyinventory: Preliminary professionalmanual*. Menlo Park. CA: MindGarden, Inc.

Spielberger, C. D.,&Vagg, P. R. (Eds.). (1995). *Series in clinical and community psychology.Test anxiety: Theory, assessment, and treatment.* Taylor & Francis.

Spielberger, C.D. (1995). State-TraitDepressionScales (Form X-1). MindGarden, Palo Alto, CA.

Spinhoven, P., Elzinga, B. M., Hovens, J. G., Roelofs, K., Zitman, F. G., van Oppen, P., & Penninx, B. W. (2010). The specificity of childhood adversities and negative life events across the life span to anxiety and depressive disorders. *Journal of affective disorders*, *126*(1-2), 103-112.

Sar, V., Öztürk, E., & Ikikardes, E. (2012). Cocukluk Cagi Ruhsal Travma Ölceginin Türkce Uyarlamasinin Gecerlilik ve Güvenilirligi/Validity and Reliability of the Turkish Version of Childhood Trauma Questionnaire. *Türkiye Klinikleri. Tip Bilimleri Dergis*i,[Turkiye Klinikleri Journal of Medical Sciences, *32*(4), 1054.

Şimşek, Ö. F. (2007). *Yapısal eşitlik modellemesine giriş:(temel ilkeler ve LISREL uygulamaları)*. Ekinoks.

Totan, T. (2018).Ortoakul ve lise öğrencilerinde sınav kaygısının değerlendirilmesi: Westside sınav kaygısı ölçeği [Investigation of test exam on middle and high school students: the westside test exam scale]. Batı Anadolu Eğitim Bilimleri Dergisi [Western Anatolia Journal of Educational Sciences, Research Article], 9(2), 143-155.

Totan, T , Özgül, Ö , Tosun, E . (2019). Bilişsel ve duygusal düzenlemenin sınav kaygısına olan etkisinde psikolojik dayanıklılığın aracılık rolü [The Mediation Role of Resilience in the Effect of Cognitive and Affective Regulation on Test Anxiety]. Muğla Sıtkı Koçman Üniversitesi Eğitim Fakültesi Dergisi, [MSKU Journal of Education] 6 (2) , 98-108. https://doi.org/10.21666/muefd.605853

Totan,T.,&Yavuz,Y. (2009). Westside sınav kaygısı ölçeginin türkçe formunun geçerlik ve güvenirlik çalışması. [The validity and reliability study of the turkish version of westside test anxiety scale] *Mehmet Akif Ersoy Üniversitesi Egitim Fakültesi Dergisi, 17,*95-109.

Trigueros, R., Padilla, A. M., Aguilar-Parra, J. M., Rocamora, P., Morales-Gázquez, M. J., &López-Liria, R. (2020). Theınfluence of emotionalıntelligence on resilience, test anxiety, academicstressandthemediterraneandiet. A studywithuniversitystudents. *International Journal of EnvironmentalResearchandPublicHealth*, *17*(6), 2071. http://dx.doi.org/10.3390/ijerph17062071

Ülker Tümlü, G, Recepoğlu, E . (2013). Üniversite akademik personelinin psikolojik dayanıklılık ve yaşam doyumu arasındaki ilişki [The relationship between psychological resilience and life satisfaction of university academic staf]. *Yükseköğretim ve Bilim Dergisi* [Journal of Higher Education and Science], (3) , 205-213 .

Viljoen, M. (2016). *Correlationsbetweenstress-associatedanxietyandphysiologicaldeterminants of health in adolescents* (Doctoraldissertation, Stellenbosch: StellenboschUniversity).

World HealthOrganization (WHO). (1985). *Diabetesmellitus: Report of a WHO studygroup [meetingheld in Genevafrom 11 to 16 February 1985]*. World HealthOrganization.

Zeidner, M. (1996). How do high school and college students cope with test situations?. *British Journal of Educational Psychology*, *66*(1), 115-128. https://doi.org/10.1111/j.2044-8279.1996.tb01181.x

Zeidner, M.,&Matthews, G. (2005). Evaluation anxiety: Currenttheoryandresearch. In A. J. Elliot& C. S. Dweck (Eds.), *Handbook of competenceandmotivation*. Guilford Publications.

Zeytinoğlu, S. (1991). Sağlık, sosyal hizmet, hukuk ve eğitim alanlarında çalışanların Türkiye'de çocuk istismarı ve ihmali ile ilgili görüşleri. *Ankara: Gözde Repro Ofset*.

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: April 28, 2021
Accepted: June 14, 2021
http:// dergipark.org.tr/rep

e-ISSN: 2602-3733

June 2021 ◆ 5(1) ◆ 71-82

Research Article

Published: 06.30.2021

Predictive Relations between Psychological Well-Being, Instagram Addiction and Values in University Students

Hümeyra Korkmaz[1]

Istanbul Sabahattin Zaim University

Bülent Dilmaç[2]

Necmettin Erbakan University

Abstract

This research was conducted to analyze the predictive relations between psychological well-being of university students, their Instagram addiction and their values. The study group of the research consists of 574 students from various universities in Turkey. The scales used in data collection are “Values Scale” developed by Dilmaç, Arıcak and Cesur; “PERMA Scale” standardized by Demirci, Ekşi, Dinçer and Kardaş; and “Instagram Addiction Scale” standardized by Kırcaburun. The research performed the structural equation model analysis to determine the relations between psychological well-being, Instagram addiction and values in university students and also to test the relations between these variables. As a result, it has been found that there is a positive significant correlation between participants’ values and their psychological well-being; a non-significant correlation between their values and their Instagram addiction and finally a negative significant correlation between their psychological well-being and their Instagram addiction.

Key Words

Addiction • Instagram addiction • Psychological well-being • Values

[1] Istanbul Sabahattin Zaim University, Istanbul, Turkey. E-mail: hmeyrakorkmaz@gmail.com **ORCID:** 0000-0003-3548-9099

[2] **Correspondance to:** Faculty of Ahmet Keleşoğlu Education, Necmettin Erbakan University, Konya, Turkey. E-mail: bulentdilmac@gmail.com **ORCID:** 0000-0001-5753-9355

Citation: Korkmaz, H., & Dilmaç, B. (2021). Predictive relations between psychological well-being, instagram addiction and values in university students. *Research on Education and Psychology (REP)*, *5*(1), 71-82.

As a result of its rapid development, technology' s positive and negative effects on individuals and societies are seen today. With this speed, technology has entered our lives respectively through television, telephone, computer, internet and finally social media. Although technology provides a more comfortable life, it has a newest and very negative aspect which is the technology addiction (Dinç, 2015). Concepts that have just entered our agenda lead to the formation of new concepts (such as internet addiction) in the literature. This study is conducted with the aim of learning the direct or indirect relationships of psychological well-being and values with Instagram addiction, and to shed light on what we can do to increase our psychological well-being and to get rid of Instagram addiction. Accordingly, it would be suitable to explain the concepts of values, psychological well-being and Instagram addiction first.

Humans are social beings. Every individual belongs to some social, economic, religious or occupational groups, especially like family. They have to follow certain rules and social expectations as they live (Cüceloğlu, 2012). Values are of these rules and expectations. Every society has its unique values. Values settled in society through its culture can be changeable over time and they are hard to be determined and identified. (Çınar, 2013). Once the individuals adopt them, values became present psychological realities that regulate people's sensitivity, likes and dislikes (Şerif, 1985). Therefore, if one aims to analyze a society's structure, the most effective method would be to determine this society's value judgments (Özensel, 2015).

Values are the criteria that give meaning to the culture and society and determine their importance. According to Fichter (2011), values can be identified by these features: Values are in a statue at which individuals agree on and have a mutual sharing. People take values seriously for the sake of a peaceful society. Values also include passions and they are separated from other objects in terms of causing people to act in agreement.

The theory of values identifies values as guiding, desirable and constantly changeable principles. Schwartz discusses values under ten major dimensions and bases them on three universal needs; biological needs, needs that are required by social interaction and needs of societies to survive and to be in prosperity. The main purpose of originating ten major dimensions is that they include all basic values acknowledged by different cultures. Schwartz describes ten dimensions of values as follows: (I) Stimulation: It is the excitement, the innovation and the difficulty in life. (II) Hedonism: It means enjoying life. (III) Power: It means gaining social status and prestige and having control and superiority over people. (IV) Achievement: It is the personal achievement gained by being competent to social standards. (V) Self-Direction: It is an individual's independence in producing, discovering and choosing her thoughts and actions. (VI) Tradition: It is using and respecting traditional behavioral patterns and being religious. (VII) Security: It is the security of individuals, relationships and society. (VIII) Conformity: It is the restriction of tendencies and urges that might violate other individuals' rights. (IX) Benevolence: It is providing and protecting welfare for other members of society. (X) Universalism: It is understanding, appreciation, tolerance and protecting people's welfare and nature (Schwartz, 2006).

One variable which has a positive significant correlation with values is psychological well-being (Bulut, 2018; Telef, Uzman & Ergün, 2014). Keyes, Shmotkin and Ryff (2002) extend the term of well-being into subjective well-being and psychological well-being. Both terms examine the psychological well-being but they focus on different aspects of what it means to be well. While subjective well-being makes more universal evaluations about life quality, psychological well-being mostly interested in development in the face of existential challenges such as having a meaningful goal in life, growing up as an adult and developing healthy relationships with people. Psychological well-being is a functional concept to express that a person has a positive perspective on her personality and life, that she believes her life is meaningful and that she develops positive and healthy relationships with others and makes decisions to achieve self-realization (Albayrak, 2013). Ryff developed a model for psychological well-being based on the other models in the field. He defines it as a whole formed of self-acceptance, autonomy, purpose in life, environmental mastery, personal growth and positive relations with others (Ryff, 1995). Psychological well-being is identified in three different fields: developmental psychology, clinical psychology and mental health studies. Developmental psychology defines psychological well-being as lifelong growth. Clinical psychology offers various formulas about it and finally, mental health studies describe it as the absence of mental illnesses. But there are models in this field that also consider positive effects (Ryff, 1995).

Cowen defends that psychological well-being is a broader term than psychopathology. He expresses that it is more helpful to concern about individuals' psychological well-being before any illness emerges rather than examining the illnesses. Also, Cowen mentions five ways to achieve psychosocial wellness; developing healthy relationships in childhood, gaining new adequacies appropriate to one's age and ability, joining environments that encourage wellness, gaining control over one's life and coping with stress. However, Cowen recognizes that real life is more complicated and that's why all these ways are interdependent to each other (Cowen, 1994).

The low-level of psychological well-being raises the possibility of filling one's deprivations in life with negative things. One of them is addiction. All substances and activities that are uncontrollably consumed by people have the risk of addiction (Turkish Green Crescent Society, 2018). With the development of technology and the internet, social networks identified as the networks where personal or professional relationships emerge became the main element of daily life (Akyazı & Tutgun Ünal, 2013). Social networks that include individuals of different age-groups caused real environments to be replaced by virtual platforms (Tiryaki, 2015). Ögel (2017) claims that people started to have double identities because of these virtual platforms. One is the real-life identity which holds the characteristics the person does not want to have or wants to remain hidden. The other is the virtual-life identity which holds the characteristics she wants to have or she dreams of because she cannot have. The virtual-life identity is a method a person chooses to express herself. To be able to say that the person who is accustomed to this identity is an addict, she has to possess some symptoms. Some of these symptoms are uneasiness that comes with the lack of access to the internet, being prevented from the daily responsibilities due to internet usage, hiding the amount of time one spends online, using the internet to avoid bad thoughts and experiences. Young (1996) describes internet addiction as a psychiatric impulse-control disorder that causes addictions like gambling. He creates a questionnaire for internet addiction by rearranging the diagnostic criteria of pathological gambling. Thus, he is one of the first researchers who designates the diagnosis criteria of internet addiction (Erden & Hatun, 2015).

These criteria are as follows (Young, 1996); (I) constantly thinking about the internet (II) having a need for spending more time online to be satisfied, (III) unsuccessful attempts to quit or to curtail the usage of internet, (IV) feeling uneasy or angry in a state of quitting or curtailing the usage of internet, (V) spending more time on the internet than what is actually intended, (VI) having problems with the social environment and risking or losing opportunities for education and career due to the extreme amount of time spent on the internet, (VII)

Lying other people about how much time is spent on the internet, (VIII) using the internet to avoid problems or negative emotions (Young, 1996).

Today, one application that has the most users among other social networks is Instagram. Users are increasing every day and it continues to reach larger masses as it updates itself. Besides being a communication tool, Instagram started to be used for other purposes as people began to use their creativeness. This resulted in the emergence of new terms and occupational groups such as brands using social networks or influencers to make advertisements or accounts created for specific themes like traveling and food (Ünlü, 2018). Instagram addiction can be defined as the inability in managing the amount of time a person spends on Instagram to check her posts or others' posts; getting bored of the real life because Instagram, where everyone shares their best moments, becomes more appealing; having more friends on Instagram than what one has or can in real-life and meeting the need of communication through it; increasing feeling of depression and loneliness as a result of all these (Kırcaburun, 2017).

Method

Research Model

This quantitative research intends to designate the predictive relations between values of university students, their psychological well-being and their Instagram addiction and to test these relations with the structural equation model.

Study Group

The study group of the research consists of 574 voluntary students from various universities in Turkey. 173 (30.2%) of these students are male while 401 (69.8%) of them are female.

Measurement Tools

Personal Information Form

It is the form prepared to learn participants' age, gender and educational background and also their parents' educational background.

The Values Scale

The Values Scale developed by Dilmaç, Arıcak and Cesur (2014) bases on grading value statements, which reflect one's emotions and thoughts in the best way under the meanings and importance of value statements in her life. The scale consists of 39 value statements and 9 sub-dimensions. These nine factors are social values, career values, intellectual values, spiritual values, materialistic values, honor of humanity, romantic values, freedom and munificence or courage. Likert type scale ranges from 0 to 9. If a participant's score drops and gets close to zero, it means that this value does not take an important place in her life; but if the score increases and gets close to nine, it means that this value is very important and essential for her (Dilmaç et al., 2014).

The exploratory factor analysis is performed to analyze all value components and it has been found that the Kaiser-Meyer-Olkin sampling adequacy value is 0.926 and Bartlett's Sphericity Test of approximate Chi-Square value is 14543.11 ($p<.001$). In the last factor analysis, it is also found that the Kaiser-Meyer-Olkin sampling adequacy value is .910 and Bartlett's Sphericity Test of approximate Chi-Square value is 9133.26 ($p<.001$). The common variance of all values except Justice/Equity (.466) ranges between .50 and .80. On a factor basis, the Cronbach alpha internal consistency coefficients of the Values Scale were calculated. The coefficient was found to be .90 for "Social Values," .80 for "Career Values," .78 for "Intellectual Values," .81 for "Spiritual Values," .78 for "Materialistic Values," .61 for "Human Dignity," .66 for "Romantic Values," .65 for "Freedom," and .63 for "Munificence." Based on these results, the first psychometric findings of the Values Scale prove its validity and reliability (Dilmaç et al., 2014).

The Perma Well-Being Scale

It was adapted to Turkish by Demirci, Ekşi, Dinçer and Kardaş (2017). The PERMA Scale developed by Butler and Kern (2016) aims to make Martin Seligman's conceptualization of five-dimensional well-being measurable. These dimensions are positive emotions, positive relationships, meaning, accomplishment and engagement. Analysis of the scale is made by measuring the average scores of five dimensions in themselves which are positive emotions (e.g. How often do you feel cheerful?), engagement (e.g. What is the measure of your excitement or your interest in events in general?), positive relationships (e.g. How satisfied are you with your relationships?), meaning (e.g. How meaningful and purposeful do you lead your life in general?) and accomplishment (e.g. How often do you achieve your goals?). The scale formed of these five dimensions that were reported with a dashboard includes 15 items in total because each one of the five dimensions has three items. Butler and Kern (2016) add 8 more filler items to these. One of them is the indicator of overall well-being. 15 items and the well-being item are put into the analysis together to calculate the total score of well-being. Besides these, there are 7 filler items on the scale. Three of them are used to assess the feelings about being healthy, the other three are used to assess negative emotions and the last one is used to assess the feeling of loneliness. Even though the PERMA Scale is formed of 15 items, the developers of the scale recommend using the 23-items questionnaire due to the important data gained with additional items. Also, items about negative emotions and loneliness are used to avoid biases that might result from participants' urge to consistently answer the positive items (Demirci et al., 2017).

The Instagram Addiction Scale

The Internet Addiction Scale was developed by Young (1996) and adapted to Turkish by Bayraktar (2001). Kırcaburun and Griffiths (2018) uses the same scale to measure Instagram addiction by replacing "Internet" with "Instagram" in the questionnaire. Due to the change, Kırcaburun and Griffiths (2018) makes validity and reliability analysis of the scale. There are not any negative items in the Internet Addiction Scale formed of 20 items and a single factor, and the total score of the scale provides acquiring data for determining individuals' level of addiction.

First, KMO and Bartlett's Sphericity Test are used to apply the exploratory factor analysis. When the findings are found to be adequate (KMO = .92, Barlett's = 2198.55) the analysis proceeded (Büyüköztürk et al. as cited in Kırcaburun, 2017).

According to the results of the exploratory factor analysis, the Instagram Addiction Scale formed of 15 items includes 2 sub-factors which are "social influence" and "distraction." The 53.90% of the total variance is explained with distraction factor that explains 11.18% of the total variance and social influence factor that explains 42.72% of it (Kırcaburun, 2017).

Factor loads of the scale items range between .36 and .69. As a result of values, the scale items are seen to be significant. The graphic of the self-value-factor number made for the Instagram Addiction Scale shows the two-factor structure of the scale. The confirmatory factor analysis is also conducted to confirm the structure acquired via the exploratory factor analysis. The fit values which are calculated x2 / sd = 2.88, GFI = .91, CFI = .93, RMSEA = .07 as a result of the confirmatory factor analysis, testifies the validity of the scale's factor structure (Hu & Bentler as cited in Kırcaburun, 2017).

In the last stage, with the reliability analysis, the Cronbach alpha internal consistency coefficients are calculated .90 for the scale, .85 for the distraction sub-factor and .86 for the social influence sub-factor. As a result of validity and reliability analysis, it can be suggested that the scale is valid and reliable to measure the Instagram addiction of university students (Kırcaburun, 2017).

Data Collection and Analysis

The data is collected by applying the Values Scale, the Perma Well-Being Scale and the Instagram Addiction Scale on participants who were selected by the appropriate sampling method. Students from various universities in Turkey participated in the study and the structural equation model analysis was performed to test the predictive relations between these students' values, their Instagram addiction and their psychological well-being. The structural equation model analysis was conducted with the AMOS 19 program and the SPSS 18 packaged software was used to calculate the percentage and the frequency of research data.

Findings

In the final model (x2/sd=4.84, $p < .001$), six exogenous variables (friendship, respect, responsibility, peaceful, tolerance and honesty) and ten endogenous variables (positive emotions, attachment, relations, meaning, success, negative emotions, health, loneliness, happiness, Instagram addiction) are found. It is seen that all paths shown in the model are statistically significant. The Tucker-Lewis Coefficient Fit Index (TLI), The Bentler-Bonett Normed Fit Index (NFI) and other fit indices demonstrate a good fit of the model. Every one of the two-tailed correlations between endogenous variables in the model has high values and they are statistically significant. This significance is also affected by the correlation values that include the subscales of the model.

Table 1

Fit Statistics for the Related Structural Equation Model

Criterion Indices	*Reference*	*Perfect Fit Indices*	*Acceptable Fit Indices*	*The Model Indices*
(x^2/sd)		≤ 3	$\leq$ 4-5	4.84
RMSEA		≤ 0.05	0.06-0.08	0.08
SRMR		≤ 0.05	0.06-0.08	0.06
NFI		≥ 0.95	0.94-0.90	0.91
CFI		≥ 0.97	≥ 0.95	0.95
GFI		≥ 0.90	0.89-0.85	0.89
AGFI		≥ 0.90	0.89-0.85	0.86
TLI		≥ 0.95	0.94-0.90	0.91

Fit Statistics in Table 1 indicates that x2/sd = 4.84, RMSEA = 0.08, SRMR = 0.06, NFI = 0.91, CFI = 0.95, GFI = 0.89, AGFI = 0.86 and TLI = 0.91. As a result, the model was found to be acceptable fit (Bollen, 1989; Browne & Cudeck, 1993; Byrne, 2010; Hu & Bentler, 1999; Kline 2011; Tanaka & Huba, 1985). The one-factor model, that is analysed, is shown in Figure 1. All paths in the model are significant with level 0.01.

The Table 2 demonstrates that the independent variable that affects psychological well-being is values (t = 5.84, p < 0.01). The coefficient value for this factor is found to be β = 0.461. Based on the findings, there is a positive and linear significant correlation between university students' values and their psychological well-being. In another word, the results indicate that the increase in the values of students will also raise their psychological well-being.

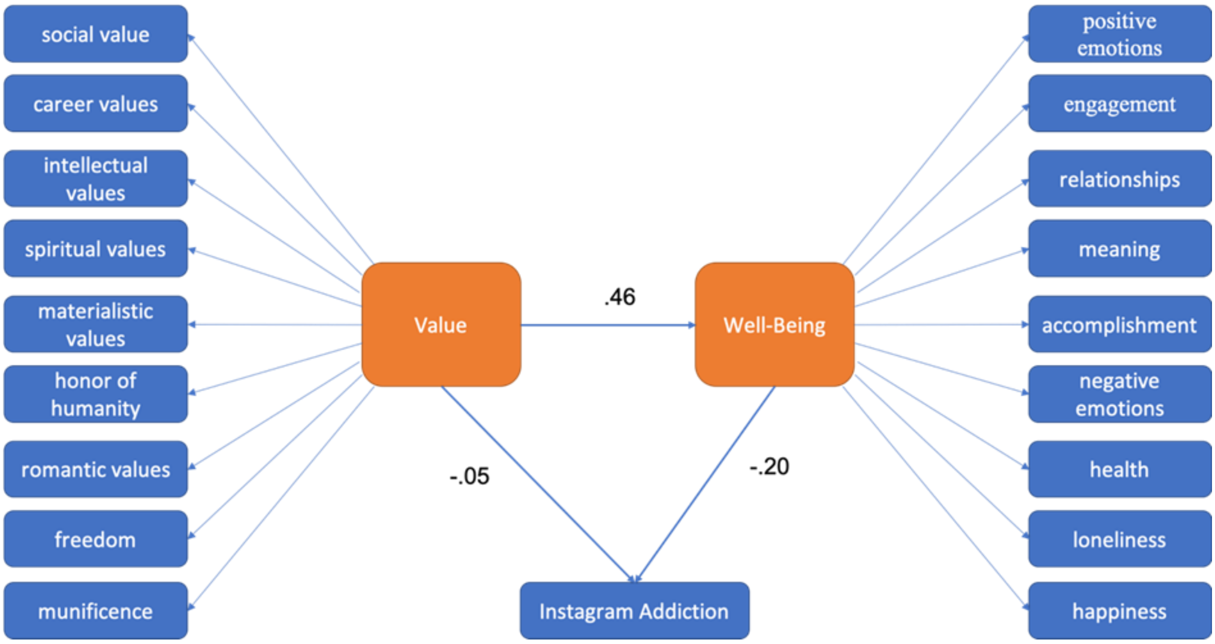
Table 2

The Model of the Predictive Relationships Between Values, Psychological Well-Being and Instagram Addiction

Predictor Variable	**Dependent Variable**	**Total Effect**	**Direct Effect**	**Indirect Effect**	**Standard Error**	**Critical Ratio**
Values	Psychological Well-Being	.46	.46	0	0.04	5.84*
Values	Instagram Addiction	-0.14	-0.05	-0.09	0.38	Insignificant
Psychological Well-Being	Instagram Addiction	-.20	-.20	0	0.84	-3.18*

Figure 1

Path Anlaysis of The Model



In the model, the effective variable on Instagram addiction is psychological well-being (t = -3.18, p < 0.01) and the coefficient value for this factor is calculated as β= -0.20. Based on these results, there is a negative and linear significant correlation between university students' psychological well-being and their Instagram addiction. That is, when students' psychological well-being increases their Instagram addiction will decrease.

Discussion

The aim of this research is to examine whether there is a meaningful relationship between Instagram addiction, which is one of the concepts that emerged in a period of rapid technological developments, and values and psychological well-being. Accordingly, a significant positive relationship has been found between values and psychological well-being, a meaningless relationship between values and Instagram addiction, and a negative significant relationship between psychological well-being and Instagram addiction. In this part of the study, findings of predictive relations between university students' values, their psychological well-being and Instagram addiction are discussed and interpreted.

Based on the research findings, there is a positive and linear correlation between university student's values and their psychological well-being. Namely, students' psychological well-being increases as their values also increase. Other studies are supporting these findings in the field. Bulut (2018) suggests that there is a positive and linear correlation between university students' well-being and their values. Likewise, in their study about teacher candidates' values and their psychological well-being, Telef, Uzman, and Ergün (2014) find that well-being has a positive and linear correlation with self-direction, hedonism, achievement, universalism, security, conformity and benevolence.

Moreover, in their analysis of the Iran sample, Joshanloo and Ghaedi (2009) conclude that success and tradition are predicted by both hedonic and eudaimonic well-being and power, universalism, conformity and benevolence are significantly correlated with eudaimonic well-being. They also assert that values are more useful to predict eudaimonic well-being rather than to predict hedonic well-being.

Another result of this study is that there is a negative and linear significant correlation between university students' psychological well-being and their Instagram addiction. Based on the findings, the participants' Instagram addiction decreases while their well-being increases or their well-being decreases whereas their addiction increases. Even though there is not any research about psychological well-being and Instagram addiction, there are studies that include similar topics.

Uz, Öz, and Aysan (2016), who study the relations between problematic internet usage, psychological well-being and social support in university students, discover a negative significant correlation between psychological well-being and internet overuse or negative outcomes of internet usage. Furthermore, in their research about high school students' psychological well-being and their social media addiction Söner and Yılmaz (2018) assert that psychological well-being of the students with smartphones is higher and that there is a negative significant correlation between conflict, a sub-dimension of social media addiction, and psychological well-being.

Sezer (2013) finds that the amount of time one spends on the internet is significantly effective in their psychological well-being. Based on his work, both internet overuse and lack of any internet usage are found to be negatively correlated with psychological well-being. Likewise, Koç (2017) who examined the relationship between subjective well-being and internet addiction in university students indicates that internet addiction is lesser in individuals with higher well-being.

In our research, we could not find any correlation between Instagram addiction and values. However, Doğan (2018) discovers that as the internet addiction increases, values of power, hedonism and stimulation increase too, but values of universalism, benevolence, tradition, conformity and piety decline. Thus, a correlation between internet addiction and some values has been found. So far, the only research in Turkey on Instagram addiction is Kırcaburun (2017)'s work on Instagram addiction, personality and self-liking in university students. This work underlines a negative correlation of Instagram addiction with self-liking, self-control and agreeableness. As Instagram addiction increases, self-liking, self-control and agreeableness decline.

Similarly, Meral and Bahar (2016) reveal that psychological well-being is a positive significant predictor of problematic internet usage in their research on the correlation of problematic internet usage with loneliness and psychological well-being in secondary school students.

Sharma and Sharma (2018) who analyze the correlation between internet addiction and psychological well-being of university students in Central India, confirm the negative effect of internet addiction on psychological well-being. Moreover, Çardak (2013)'s work on psychological well-being of university students and their internet addiction proves that students with higher internet addiction have lesser psychological well-being. Findings reveal the negative effect of internet addiction on psychological well-being. Rehman, Shafi, and Rizvi (2016)'s work support these findings as well. It identifies a negative correlation between internet addiction of youth of Kashmir and their psychological well-being. On the other hand, Gulfisha (2018) finds a positive significant correlation between Facebook addiction and psychological well-being in his study on teenagers. Contrary to this, Sridharan (2017) who examines Facebook addiction, loneliness and well-being in college students finds a negative significant correlation between Facebook addiction and psychological well-being. Additionally, Kara and Tekin (2017) detects significant differences among secondary school students in their habit of social media usage and their attitudes towards values in terms of the daily amount of time they spend on the internet. Findings demonstrate that sense of responsibility is higher in students who do not use social media, while the value of friendship is higher in students who use social media.

In this research, the predictive relations between values, psychological well-being and Instagram addiction in university students are examined. The research findings demonstrate that students' values and their Instagram addiction have significant correlations with psychological well-being. The research is important in this context where it clears up the way for us to take precautions.

Some suggestions can be made in the light of the evidences obtained from the study. It is thought that reconducting this research with different age groups or occupational groups would be helpful in order to make a broader assessment on this subject. Despite the ampleness of studies on psychological well-being and values at the international and national level, researches on Instagram addiction seem to be limited. It is thought that more studies on this subject will be worthwhile. In this research, the relationships between values, psychological well-being and Instagram addiction are revealed. In future studies, it is thought that examining similar studies in terms of variables such as gender, socio-economic status, educational status of parents will contribute to the field. Nowadays, it is seen that with technological developments, behavioral addictions have turned out to be technology and internet addiction, computer addiction, smart phone addiction, online game addiction, social media addiction, Facebook addiction and Instagram addictions. In order to prevent and improve this case, parent-student information studies can be applied in primary and high schools. At the same time, awareness studies on these issues can be carried out with student clubs and Turkish Green Crescent at universities.

References

Akyazı, E., & Ünal, A. T. (2013). İletişim fakültesi öğrencilerinin amaç, benimseme, yalnızlık düzeyi ilişkisi bağlamında sosyal ağları kullanımı [Purpose, adoption and level of loneliness relation and the use of social networks: a study on undergraduate communication students]. *Global Media Journal TR, 3*(6), 1-24.

Albayrak, G. (2013). *Psiko-Eğitim kuramı ile psikodrama'nın, üniversite öğrencilerinin psikolojik iyi oluşlarına etkisinin karşılaştırmas*ı [Comparison of the effect of psycho-education program and psychodrama on psychological well-being's of university students] (Master Thesis). Mersin University, Mersin.

Bayraktar, F. (2001). *İnternet kullanımının ergen gelişimindeki rolü* [The Role of internet usage in the development of adolescents] (Unpublished Master Thesis). Ege University, Izmir.

Bulut, S. (2018). *Üniversite öğrencilerinin sahip oldukları değerler, psikolojik iyi oluşları ve mutluluk düzeyleri arasındaki yordayıcı ilişkiler* [The Predictor relationships among psychological wellbeing, the grades of happiness, and values university students have] (Master Thesis). Istanbul Sabahattin Zaim University, Istanbul.

Butler, J., & Kern, M. (2016). The PERMA-Profiler: a brief multidimensional measure of flourishing. *International Journal of Wellbeing*, *6*(3), 1-48.

Bollen, K.A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods and Research*, *17*(3), 303-316.

Browne, M. W. & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sage Focus Editions*, *154*: 136-136.

Byrne, B. M. (2010). *Structural equation modeling with AMOS: basic concepts, applications, and programming* (2nd ed.). New York: Taylor and Francis.

Cowen, E. (1994). The of Psychological well-ness: challenges and opportunities. *American Journal of Community Psychology*, *22*(2), 149-180.

Cüceloğlu, D. (2012). *İnsan ve davranışı* [Human and behavior]. Istanbul: Remzi Bookstore.

Çardak, M. (2013). Psychological well-being and internet addiction among university students. *The Turkish Online Journal of Educational Technology*, *12*(3), 134-141.

Çınar, A. (2013). *Değerler felsefesi ve psikolojisi* [Philosophy and psychology of values]. Bursa: Emin Publishing.

Dilmaç, B., Arıcak, O., & Cesur, S. (2014). A Validity and reliability study on the development of the values scale in Turkey. *Educational Sciences: Theory & Practice*, *14*(5), 1661-1671.

Dinç, M. (2015). Teknoloji bağımlılığı ve gençlik [Technology addiction and youth]. *Journal of Youth Research*, *3*(3), 31-65.

Doğan, M. (2018). Ergenlerin değer yönelimleri ve değer yönelimlerinin internet bağımlılığıyla ilişkisinin incelenmesi [Investigation of the value tendencies of adolescents and the relation between value tendencies and internet addiction]. *International Journal of Social and Educational Sciences*, *5*(10), 263-285.

Demirci, İ., Ekşi, H., Dinçer, D., & Kardaş, S. (2017). Beş boyutlu iyi oluş modeli: PERMA ölçeği Türkçe formunun güvenilir ve geçerliği [Five-dimensional model of well-being: the validity and reliability of Turkish version of PERMA-Profiler]. *The Journal of Happiness & Well-Being*, *5*(1), 60-77.

Erden, S., & Hatun, O. (2015). İnternet bağımlılığı ile başa çıkmada bilişsel davranışçı yaklaşımın kullanılması: bir olgu sunumu [The Use of cognitive-behavioral therapy in coping with internet addiction: a case study]. *Addicta: The Turkish Journal on Addictions*, *2*(1), 53-83.

Fichter, J. (2011). *Sosyoloji nedir?* [Sociology] (N. Çelebi, Tr.) Ankara: Anı Publishing.

Gulfisha (2018). Facebook addiction as related to adolescence's psychological well-being. *International Journal of Indian Psychology*, *6*(3), 115-121.

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), 1-55.

Joshanloo, M., & Ghaedi, G. (2009). Value priorities as predictors of hedonic and eudaimonic aspects of well-being. *Personality and Individual Differences*, *47*(4), 294–298.

Kara, A., & Tekin, H. (2017). The Investigation of human values perceived from the use of social media of secondary school students. *Universal Journal of Educational Research*, *5*(11), 1912-1925.

Keyes, C., Shmotkin, D., & Ryff, C. (2002). Optimizing well-being: the empirical encounter of two traditions. *Journal of Personality and Social Psychology*, *82*(6), 1007–1022.

Kırcaburun, K. (2017). *Üniversite öğrencilerinde instagram bağımlılığı, kişilik özellikleri ve kendini sevme arasındaki ilişkinin incelenmesi* [Investigation of the relationship between self-liking, big five personality and Instagram addiction among university students] (Master Thesis). Sakarya University, Sakarya.

Kırcaburun, K., & Griffiths, M. D. (2018). Instagram addiction and the big five of personality: the mediating role of self-liking. *Journal of Behavioral Addictions*, *7*(1), 158-170.

Kline, R. B. (2011), *Principles and practice of structural equation modeling*. New York: The Guilford Press.

Koç, P. (2017). Internet addiction and subjective wellbeing in university students. *Journal of Positive Psychology & Wellbeing*, *1*(1), 34-41.

Meral, D., & Bahar, H. (2016). Ortaöğretim öğrencilerinde problemli internet kullanımının yalnızlık ve psikolojik iyi oluş ile ilişkisinin incelenmesi [Investigating the relationship between problematic internet use and psychological well-being and loneliness in secondary education students]. *Erzincan University Journal of Education Faculty*, *18*(2), 1117-1134.

Ögel, K. (2017). *İnternet bağımlılığı internetin psikolojisini anlamak ve bağımlılıkla başa çıkmak* [Internet addiction understanding the internet psychology and coping with addiction]. Istanbul: Turkey IsBank Cultural Publications.

Özensel, E. (2015). Sosyoloji ve değer [Sociology and values]. B. Dilmaç, & H. Bircan (Ed.), *In Değerler ve değerler psikolojisi* [Values and values psychology]. Ankara: Pegem Academy Publishing.

Rehman, A., Shafi, H., & Rizvi, T. (2016). Internet addiction and psychological well-being among Youth of Kashmir. *The International Journal of Indian Psychology*, *3*(3), 6-11.

Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, *4*(4), 99-104.

Schwartz, S. (2006). Basic human values: theory, measurement, and applications. *Revue Francaise de Sociologie*, *47*(4), 929-968.

Sezer, F. (2013). Psikolojik iyi olma durumu üzerine etkili faktörler [Factors that affect psychological well-being]. *E-Journal of New World Sciences Academy*, *8*(4), 489-504.

Sharma, A., & Sharma, R. (2018). Internet addiction and psychological well-being among college students: a cross-sectional study from Central India. *Journal of family medicine and primary care*, *7*(1), 147.

Sridharan, C. (2017). Facebook addiction, loneliness and psychological well-being among college students. *International Journal of Scientific Research*, *6*(12), 250-252.

Söner, O., & Yılmaz, O. (2018) Lise öğrencilerinin sosyal medya bağımlılığı ve psikolojik iyi oluş düzeyleri arasındaki ilişki [The Relationship between social media dependency and psychological well-being levels of high school students]. *Journal of Ufuk University Institute of Social Sciences*, *7(*13), 59-73.

Şerif, M. (1985). *Sosyal kuralların psikolojisi* [The Psychology of social norms]. (İ. Sandıkçıoğlu, Tr.) Istanbul: Alan Publishing.

Tanaka, J. S. & Huba, G. J. (1985). A fit index for covariance structure models under arbitrary GLS estimation. *British Journal of Mathematical and Statistical Psychology*, *38*(2), 197-201.

Telef, B., Uzman, E., & Ergün, E. (2014). Öğretmen adaylarında psikolojik iyi oluş ve değer arasındaki ilişkinin incelenmesi [Examine the relation between psychological wellbeing and values in teacher candidates]. *Electronic Turkish Studies*, *8*(12), 1297-1307.

Tiryaki, S. (2015). *Sosyal medya ve Facebook bağımlılığı* [Social media and Facebook addiction]. Konya: Literatürk Academia.

Turkish Green Crescent Society. (2018). *101 Soruda bağımlılık* [101 Questions on addiction]. 17. Istanbul: Green Crescent Publishing.

Uz, A.B., Öz, F.S., & Aysan, F. (2016). *Üniversite öğrencilerinde problemli internet kullanımının psikolojik iyi-oluş ve sosyal destek ile ilişkisi* [Relationship of problematic internet usage to psychological well-being and social support in college students]. *Journal of the Human and Social Sciences Researches*, *5*(4), 1035-1046.

Ünlü, F. (2018). *Orta yaş üstü bireylerin dijital çağda iletişim kurma pratikleri: sosyal medya bağımlılığı ve sosyal izolasyon* [Communication practices of older adults in digital age: social media addiction and social isolation] (Master Thesis). Marmara University, Istanbul.

Young, K. S. (1996). Psychology of computer use: XL. addictive use of the internet: a case that breaks the stereotype. *Psychological Reports*, *79*(3), 899-902.

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: April 8, 2021
Accepted: June 20, 2021
http://dergipark.org.tr/rep

e-ISSN: 2602-3733

June 2021 ◆ 5(1) ◆ 83-101

Research Article

Published: 06.30.2021

Examination of the 1997 Curriculum in Lebanon

Eslam Aljaafil[1]

Necmettin Erbakan University

Ömer Beyhan[2]

Necmettin Erbakan University

Abstract

Through education and only education a fragmented society can be rebuilt and developed. In order to reach this aim, a country's education system should be carefully considered, planned, organized, applied and evaluated. However, in a politically and economically unstable country like Lebanon, the Lebanese society went through several conflicts which laid its adverse effect on the education sector. Therefore, in order to plan for a better future and a better education system, first we need to determine and analyze the factor which led to the fall back of the Lebanese public curriculum. This research has a qualitative research design and it aims to investigate the stakeholders' perspectives with the help of the data obtained by face-to-face interviews and focus groups. The study depicts the stakeholders' frustration regarding the currently used curriculum as they all agreed and stressed the importance of developing a new curriculum which suits the students' needs and abilities. Also, their responses indicated the presence of several problems and gaps within curriculum elements itself.

Key Words

Curriculum • Education history • Education system • Lebanon • Stakeholders' perspectives

[1] **Correspondance to:** Eslam Aljaafil. E-mail: eslam.a.jaafil@gmail.com **ORCID:** 0000-0001-8631-3152
[2] Faculty of Ahmet Keleşoğlu Education, Necmettin Erbakan University, Konya, Turkey. E-mail: obeyhan@erbakan.edu.tr **ORCID:** 0000-0002-3811-0307
Citation: Aljaafil, E., & Beyhan, Ö. (2021). Examination of the 1997 curriculum in Lebanon. *Research on Education and Psychology (REP)*, *5*(1), 83-101.

Previously known as Switzerland of the Middle East, Lebanon is a country which is diverse in nature and rich in ethnicities, religious communities, and cultures. With its good standard universities and schools, 10,452 Km^2. Lebanon has always been a destination for youth and individuals who desire to attain a good quality education. Arabic is Lebanon's formal and native language, however, English and/or French are other languages Lebanese students learn in schools (Nahas, 2009). The Lebanese population is estimated to be 6 million, out of which includes about 1.5 million Syrian refugees. This diverse country includes about 54% Muslims and 46% Christians. In 2009 Beirut, the capital, was named World Book Capital (Frayha, 2009). In year 2009 the percentage of literate adults reached 89.6% and 98.7% for that of youth (Nahas, 2009). However, through history and due to its multi-political and multi-religious background, Lebanon failed to neither reduce the sectarian divisions, nor decrease the social imbalance which notably affected the Lebanese society and education. As a result, a civil war was ignited in 1975 and ended in 1990 when the conflicting parties signed the Taif agreement in 1989. Consequently, more than 150,000 deaths were recorded and the majority of Lebanon's infrastructure was destroyed (European Commission, 2017).

As mentioned before, diversity in Lebanon is a two-edged sword which is why communities were granted the chance to organize and establish their own schools. However, consecutive Lebanese governments were unable to set a common curriculum for private schools. After the civil war ended in 1990, a post war education reform was established. It covered only 3 aspects (features) of the education system, namely the curriculum, textbooks, and teacher training. In general, the educational context in Lebanon remained untouched ever since the end of the civil where the application of the reforms in 2010 remained also limited (Frayha, 2009). Further, religious sects in Lebanon have considered education to be means to reproduce and reinforce religious, social and sectarian differences while on the other hand, failed to neither compete with these systems nor to create a unified national identity (Frayha, 2009). A new united curriculum was prevented to see light due to the disagreement of the religious factions on several subjects; however, the fundamental principles which govern education in Lebanon are the Lebanese constitution, Taif Accord, the founding law of the ministry of education, the Lebanese legislation, customs, habits and historic heritages and the international agreements and commitments resulting from the United Nations' charters and international conferences. In addition, there are a great number of official and non-official documents, reports, studies which discuss different themes and topics about education, however, none has been approved or finalized by the governmental institutions, therefore we can say that Lebanon does not have a validated official and strategic vision for the education sector (Nahas, 2009).

History of Education in Lebanon

In 1943, and after Lebanon gained its independence from the French Mandate in Article 8 the Lebanese constitution acknowledged freedom of education to religious communities therefore each community was granted the right to organizes their own schools and ever since that time, diverse and parallel systems and curricula were established in Lebanon's schools. Nevertheless, those several measures were taken to increase the role of the Ministry of Education and Higher Education (MEHE), supervise private schools, centralized the education system, encourage and improve public education and create secular education but unfortunately, due to religious cleavages, this seems hard to apply. In addition, after the civil war, public education became weaker and education witnessed a sort of a chaotic growth (Frayha, 2009).

In 1798 Ein Warak School was established in Kisirwan region and it was considered the first educational institution in Lebanon which provided free education to students. In 1834 Catholics established their first school, Aintura School. Almost 30 years later, in 1861 the first Druze school was founded in the era of Mount Lebanon. In 1866 Protestants found themselves in competition with the Catholic community thus they created the Syrian Evangelical College which was later named the American University of Beirut. Its founding father, Pastor Bliss, spent four years raising the necessary funds between Britain and America then New York State granted him the license to open the college and then the Ottoman State granted him permission necessary to work and exempted the institution from taxes. The Jesuit Fathers founded their university in 1875 which was later known as the University of Saint Joseph. Later in this year Isrealis opened their school which was run by Zaki Cohen and served the Jewish community for 24 years before it was closed later on. Three years later in 1878 Muslims founded their first school named as Al Makassed Islamic School. In 1886 an Irish woman who used to live in Lebanon founded the school of Choueifat and it was later managed by ambitious educators who opened several branches in Lebanon, America, Gulf States, Egypt, Jordan, Iraq, England, Pakistan, and Germany. Also, in this year, College Des Freres was founded by 3 monks who came to Lebanon (Nazarian, 2013).

In the 19th century and while Lebanon was under the Ottoman rule, its minorities were the focus of the attention of the western countries and during that time missionary activities increased. During this period Catholic and Protestant missionary came from France, Italy, America, Britain and even Germany and Austria. If evangelization was the first task, it was coupled with some activities most notably the establishment of educational institutions. These institutions at that time played and still play an important role in shaping the elite community in the Lebanese society. Also, it is important to mention that these schools also included female students and in 1832 Beirut College for Women was established and education started to acquire the western label (Frayha, 2009).

In 1930 Rashid Youssef Beydoun established a school he called The Global College to educate the youth of Jabal Amel which was mainly of a Shiia majority. Later in 1944 the French established the Higher School of Arts. The Center of Studies and research in Mathematics and Physics was established in 1945 by the French under the direct academic supervision of the University of Lyon. One year after Lebanon gained its independence from the French mandate, the National Curriculum and test system were created and Arabic was the formal language. Flowingly, in 1950 and 1951 the Holy Spirit University and the national Lebanese University were established. Later in 1960 Beirut Arab University was founded then 27 years later in 1987 Notre Dame Catholic University was established and the Balamand Orthodox University was established in 1988. However, in 1994 Lebanon performed its first step towards revising and updating the national curriculum when the first Educational Advancement Plan was created and in 1997 the ministry of education created the first post-civil war curriculum, which ever since that time was not updated. Years later in 2005 Lebanon adopted an educational plan named the National Plan for Education for All and in 2010 an educational reform strategy was created (Nazarian, 2013).

During the French Mandate the education system was immediately reconstructed by the French government following its mandate over Lebanon. It reconstructed it in a way that serves the aims and goals of France as a mandating country to support the French position in Lebanon and Syria (Nazarian, 2013). During the independence period the public-school system witnessed a notable expansion. The aim of the Lebanese government at that time was aimed towards reshaping the aim of education in the country to foster a national identity that would preserve the new independent state. The education policy of the new government devised to fight sectarianism, increase state control over public schools, centralize the system and impose a unified curriculum on all schools. Nonetheless, the education system was hugely pressured during the civil war in 1975. The misfortunate event prevented any effort of establishing an education reform. Additionally, the civil war aftermath on education was the absence of a unified history book as history was the only subject which was not revised or updated. Consequently, till now schools are still obliged to use the history curriculum of 1960s and 1970s (Nazarian, 2013).

It should be noted that the private educational sector in Lebanon started to develop long before the public educational institutions started to develop. Most of the schools which opened in Lebanon were schools of Christian missionaries following the western education as well as being expensive. Therefore, the rest of the religious communities desired to establish their own schools and universities which advocates its doctrines. This reality has two aspects; enlightenment and openness to the Western cultures and language on one hand, and on the other hand it was one of the reasons for the rift in the Lebanese national character, closing of each sect on itself, teachings, values and concepts (AlAbtah, 2016). However, it is worth mentioning that private primary and secondary education would not have flourished if the Ottoman Empire would not have allowed Christians and all different religious groups and sects to educate their children and establish their own schools. By doing so, private schools and universities were widely spread meanwhile during the French Mandate Lebanon's education system was organized and the Higher School of Arts, the Education Center for Research in Mathematics and Physics were founded (Daccache, 2014)

The arrival of missionaries had a great impact on the establishment of a number of schools. In 1846, the Ottoman empire created Al Maarif Council which later became the Ministry of Public Knowledge which was responsible for the affairs of public education throughout the Sultanate but private schools in Lebanon remained outside this arrangement. However, during the French Mandate period, the educational policy focused on teaching French language, culture, unifying curricula and official exams, establishing a centralized administrative system while maintaining the participation of the private sector and equality between French and Arabic in the curricula. During the era of the independence the educational process continued and Arabic was adopted as an official language and the first official curriculum and exam system was issued in 1946 (Frayha et al., 2001)

Lebanon's Education System

Education systems are usually considered to be structures created by the government to educate its citizens. Each country has its own education system; however, arrangements, administration, and organization differ in size, style, vision, and aim where it can be formal or informal. On a national scale, education systems must fulfill the needs of the country (Mcgettrick, 2009). An educational system consists of several elements which comprise of educating public school students in a country, community or state. It is better to be described as remarkably complex and versatile. Similarly, attempting to modify or amend an education system demands state policy reforms, sophisticated and multiple approaches (Rebore, 2011). Public schooling commences from kindergarten classes and ends by the twelfth grade. It encompasses the regulations, policies, and laws that are established by the state (Mcgettrick, 2009). After all, the significance of pedagogy is that it is not only related to the reflection of the education system, but its development is attributed to the autonomy of the education systems (Baraldi & Crosi, 2017).

The significance of education, its general principle, and regulations were stated in the Lebanese Constitution through Article 10 and in the National Reconciliation Accord also known as the Taif Agreement (The Lebanese Parliament, 2004, p. 6). These principles and guidelines were not only stressed in Lebanese official documents, but also in international conventions which Lebanon adheres to such as the Declaration of Human Rights, the International Agreement on the Rights of the Child, and the International Convention on Economic Social and Cultural Rights, which stress the right to education, the equality of education, and to the accessibility of education (Bankmed, 2014). Even though private and public schools are evenly distributed in Lebanon, the greatest majority of Lebanese students are enrolled in private schools and universities, where primary education is compulsory until the age of twelve (Yaacoub & Badre, 2012). Lebanon's education sector forms one of the significant contributors to the Gross Domestic Product (GDP), in addition to the overall expenditure on education, taking into consideration that the latter has been constantly increasing due to the heightened recognition of the importance of education (Bankmed, 2014). After the civil war ended in 1990 a new curriculum and education system were designed in 1997 by the Lebanese Ministry of Education. Even though several reforms have been made, yet the Lebanese education system still suffers from various dilemmas such as having one public university, poor infrastructure and geographical distribution for its education facilities, and unrefined curricula and textbooks for the past twenty years. Conversely, education systems and programs in private schools are constantly being developed, amended and modernized. This discrepancy between the public and private sectors, along with the continuously evolving social and technological factors and trends, has created a gap between those two systems and their respective beneficiaries. Consecutively, on a larger scope, societies in general are not only developing entities but accelerating as well. Henceforth, Lebanon cannot fall behind in education and rely on an unrefined education system that was designed twenty years ago since education cannot be static in a robust and constantly changing world (Frayha, 2009).

General Education

Three sectors comprise the education system in Lebanon; general education, vocational and technical education, and higher education. General education is composed of four cycles: Cycle 1: kindergarten classes from 3 till 5 years old, cycle 2: primary education from 6 till 11 years old, cycle 3: intermediate education from 12 till 14 years old, and cycle 4: secondary education from 15 till 17 years old (Nahas, 2009). The Taif agreement advocated for the protection of the private education sector and strengthening of state control over private schools and the textbook (Krayem, 1997). However, it can be seen that there is a discrepancy in what it is mentioned in the document and in reality, where different private schools have different curriculum and policies. The Education Center for Research Development (CERD) is an official Lebanese institution which is responsible for the production of textbooks and curricula in Lebanon. It is a semi-autonomous institution under the minister of education where public schools are forced to use any books published by the CERD. However, the Ministry of education was not empowered to inspect most private schools during the French Mandate. Later, the Lebanese government tried to centralize inspection of private schools but failed. Therefore, public schools were inspected but private schools were only supervised (Nazarian, 2013).

According to Frayha (2009) the Lebanese education system faces two major problems. The first is the sects' influence on education and society and the second is the social quality disparities between schools and regions. In Lebanon, private schools are the dominant school model where it is sought by the middle and upper-middle income groups, and where public schools are sought by lower-middle incomes and poor social groups.

The education system in Lebanon is divided between public and private schools. Some private schools are secular, some are religious, and some are affiliated to a certain religious community (Nazarian, 2013). Article 10 in the Lebanese constitution states that "education is free as long as it does not violate or contradict morals or affect the dignity of the religions or sects in Lebanon. Nothing will affect the right of the sects in terms of the establishment of their private schools as long as they go about it in accordance with general regulations that the state issues regarding public education" (The Republic of Lebanon, 1960, p. 5) Where public education is funded by the government through the MEHE but there is no national scheme of financial support for learners in Lebanon (Tabbarah, 1997).

Private higher education in Lebanon is well developed as it also represents more than 60% of the total student enrolment in higher education however the public sector is under the guardianship of the ministry of education and higher education (European Commission, 2017). Further, there is only one public university in Lebanon which has different branches across the Lebanese soil and it was funded by the government through the MEHE and it offers university education on three levels, Bachelor, Master's, and Doctorate degrees. Concerning private higher education institutions, the main source of funding comes from the tuition fees and different types of resources and donations where sometimes foreign governments support some private universities and schools. However, there is no government financial support to families whose children are enrolled in higher education (Nahas, 2009).

Unfortunately, Life Long Learning is not addressed in the Lebanese education policy, neither in the national strategy not in its action plans. However private schools engage in Life Long Learning strategies. The Lebanese University is almost free and it is open to all students, Lebanese and foreigners who are legal residents in the country, but foreign students pay more fees than their Lebanese counterparts. Some private universities follow the American model of education like the American University of Beirut and the Lebanese American University. The Lebanese University is the only institution in Lebanon which offers public higher education in all fields and levels (European Commission, 2017).

During the French Mandate (1920 – 1946) the Lebanese Education System was adjusted in line with the French system and French became one of the official languages and half of the courses in secondary schools were taught in French. During this period, the Brevet and Baccalaureate Exams were introduced and were administered at the end of the elementary and secondary process (Nuffic, 2016). Children can enter the kindergarten cycle at the age of 3 years old. Primary education is compulsory until the age of 15 years old and the total number of schooling years in Lebanon is 12 years distributed as follow, primary education which lasts for 3 years, elementary or lower secondary education which lasts for 3 years and it is devoted to general academic subjects. This education phase ends with a national (Brevet d'Etudes) exam. Further, upper secondary education also lasts for 3 years and students are accepted after they pass the Brevet Exam. Arabic is the language of instruction but English and/or French are taught starting from primary schools and onwards. Math, Biology, Physics and Chemistry are taught wither in English or French. During high school or upper secondary education, the first year of education is common among all classes. The 2nd year consists of an array of arts or sciences. The final year is more specific and students make a choice between four programs; arts and literature, sociology and economics, life sciences, and general sciences. At the end of the third-year students also undertake another national exam (the Baccalaureate Exams) which qualifies them to enter higher education. Higher education is mainly divided into three cycles. The first cycle lasts from 3 to 4 years where students obtain a Bachelor or License degree. The second cycle lasts two years and students obtain the Master's degree and the PhD cycle lasts from 3 to 5 years. Vocational diplomas can also be obtained like obtaining a teaching or translation diploma for instance (European Commission, 2017).

Vocational and Technical Education (VTE) in Lebanon

Secondary education also includes technical and vocational programs in additional to the general course of study where students who pass the national exam receive the Baccalaureate Technique Certificate. Also, students can begin studying vocational education after finishing primary education. Generally speaking, in all education cycles the French grading system is used with scores that range from 1 till 20. If students attain the total average of 10, they pass the academic year while in higher education a percentage system over 100 is used where 60 is the grade of passing the semester or the academic year (Nuffic, 2016). VTE encompasses two courses; Technical Education and Vocational Training whereas each field has a number of levels. VTE focuses on the employment sectors and occupations which require practical rather than extensive theoretical knowledge. It comprises four levels, three of which lead to the award of a qualification: (a) short term training, (b) the Certificat d'Aptitude Professionnel (CAP), (c) the Brevet Professionnel (BP), and (d) Baccalaureate Professional (Karam, 2006). While on the other hand, technical education relates to jobs and occupations requiring a thorough knowledge of the theory and a solid scientific and technological base. This field includes three levels: (a) Baccalauréat Technique (BT), (b) Technicien Supérieur (TS), and (c) License Technique (LT) and the License d'Enseignement Technique (LET).

The Lebanese Curriculum: A General Overview

General Objectives of the Curriculum

The Ministry of Education and Higher Education published the curriculum general aims, general aims for each educational cycle, weekly distribution schedule for subjects and their allocated time, education cycles and its specific curriculum, content of the curricula for each subject in each class, content details and guidelines for academic and formal assessment. The general objectives issued by the Ministry of Education and Higher Education are divided to several levels; the national level, the citizen formation level, the intellectual and human level, the social level, and the level of building an individual's personality (Center of Educational Research and Development, 1997).

The 2005 Action Plan and 2010 Education Strategy

In 2005 Lebanon adopted an education plan named The National Education Plan for All. It was funded by the World Bank and due to the CERD diminished role, the Lebanese Association for Educational Studies was assigned to study the gaps. The World Bank being the donor pushed the MEHE to develop a long-term strategy for education, therefore the 2010 strategy document tried to shed the light on research gaps. However, it should be noted that the CERD as a national institution did not participate in drafting the 2010 reform strategy. The 2005 Action Plan for Education for All was created and it was designed to offer all children in the society a good quality education. The action plan focused in a particular on girls and disadvantaged children (Shuayb, 2016).

The 2010 education strategy was based on providing an equal opportunity education, quality education, an education that will shape the culture of an individual, and an education that contributed to social integration (Council of Development and Reconstruction, 2011). The 2010 education reform addressed many gaps including a plan for education, attention to dropouts, inclusion of vocational education and consideration for students with special needs. In addition, the 2010 education reform document is limited to the Lebanese nationality where no provision for refugee students were made. Also, the document does not discuss the needs of the challenges that non-Lebanese students might encounter, nor it did address the challenges that are being faced by disadvantage Lebanese students face. Further, the reform did not address the issue of learning a foreign language which is considered as one of the main objectives of the Lebanese curriculum. The reform did not discuss in particular how they will address the education gaps between regions. Moreover, the reform didn’t focus on nation building and nationalism neither did it tackle the gap between the private and public sector. In addition, in a research published in 2016, it shows that the majority of the objectives in the 2010 strategy have not been achieved (Shuayb, 2016).

Difficulties Faced by the Education Public Sector in Lebanon

Lebanon performs well on the student to teacher ratio when compared to countries in the region and has made significant progress in achieving higher rates of enrollment in primary, intermediate and secondary education (Bankmed, 2014). In 1994, the Educational Recovery Plan was established and it was followed by a new curriculum for general education. Textbooks were produced, and teachers were trained. Further, a draft law that determines the age of compulsory education by 15 instead of 12 years old was completed. Besides, the performance of the educational administration was improved by updating it and by introducing the, Educational Management Information System (EMIS). The education sector in Lebanon also created and implemented a leadership-training program in 420 schools, then institutionalized it through the Faculty of Education at the Lebanese University to become a continuous program. Also, in 2010, a decree that “facilitated grade promotion” in primary education was canceled and a draft law was created to establish the National Agency for Higher Education Quality Assurance (Council for Development and Reconstruction, 2015).

Nonetheless, the education sector in Lebanon suffers from several dilemmas; out of which the following: (Council of Development and Reconstruction, 2015)

- Few equal opportunities are not provided for every student.

- Classes are sometimes large in number and little visual aids are provided to teachers.
- The education quality needs improvement in order to contribute to the building of the knowledge society.
- The curricula need continuous development and assessment especially since kindergarten and primary cycle curricula are not compatible.
- The quality of education in public schools are low and need improvement.
- The lack of a number of qualified teachers who teach kindergarten classes.
- Instructional aids, school buildings and administration are inadequate enough.
- Other curricula need to be constantly updated and evaluated.
- Textbooks suffer from the lack of an independent reference for its development and supervision based on predetermined criteria.
- The absence of any teacher performance evaluation system.
- The absence of a training system for school administrators.
- Concerning vocational and technical education, the most recent curriculum development efforts were in 2000.
- In public sectors teacher qualifications is a matter of conflict as some primary education teachers complain of a high percentage high school certificate holder, in addition a great number of contract teachers do not have teaching diplomas.

Further, some of the most notable problems of the education sector in Lebanon are the increased rate of private spending on education which exceeds the public spending by far. Not only public spending is low, but also it depends on external donor funding. When compared to neighboring countries, Lebanon's gross and net enrollment rates are considered low. A gap between those two rates can be observed which increases with the education level. This discrepancy indicates that repetition rates, due to failure or under achievement, increases as students move to higher education levels. Further, a gender gap can be observed in all education levels where the percentage of females surpasses that of male students. Private schools have an expanding role in the education sector since public schools have limited resources available and therefore this issue indicates the presence of a gap in the accessibility to education. Further, there are no criteria or regulations regarding the qualifications needed to fill teaching positions, as it is different from one school to another and lacks coherent structure. Additionally, there is no national standard for selecting academic employees in the higher education sector. The entire process is merely a market-oriented process. Grade repetition rates in primary and intermediate education decreased only one percent between 2007 and 2012, while the drop-out rate in intermediate education has deteriorated which is a serious challenge to the country's education system (Bankmed, 2014). Besides, according to the Council for Development and Reconstruction, public education in Lebanon does not provide equal enrollment opportunities or academic follow-up, in addition to the inequality between students of the private and public sectors in passing the official exams. Moreover, a discrepancy is observed between the kindergarten curriculum and that of primary education midst the lack of well-trained teachers for the kindergarten cycle. School buildings, educational resources, and administration constitute other challenges as well. Curriculum and national textbooks need continuous evaluation, development, and monitoring. The absence of a performance appraisal system and a training system for principals on leadership and educational administration hinder the educational process as well (Council for Development and Reconstruction, 2015).

With respect to what has been stated, even though Lebanon's education system achieved several successes, it still suffers from various interrelated issues at different levels which hamper it from achieving its targets. In 1994 and after the civil war ended in the 1990 and new educational development plan was launched which resulted in the 1997 new curriculum and textbooks. This curriculum remained untouched until an action plan was designed in 2005 and applied in 2010 when an education reform strategy was created. However, the 1997 curriculum was neither revised, assessed nor updated until now. Compared to the years in 1997, the quality of education improved in public schools but the dropout rate remained high especially amongst disadvantaged groups. Therefore, education inequality increased and after 13 years only a reform strategy was launched.

Lebanon witnessed one education reform and one action plan since the post-war curriculum was designed in 1997. However, even though the policy makers collaborated with research institutes when designing the reform, but their relationship was haphazard and it was influenced by a number of factors such as personal relationship, policy brokers and donors (Shuyab, 2016).

Rationale and Purpose of the Study

An education system is not born from nothing, on the contrary, it is an embodiment of a reflection of a political, philosophical, economic and social reality which affects it and is affected by it. Further, if societies are to be developed further in life, then close attention should be paid to the education systems since it should be parallel with the changing variables of our time. In Lebanon neither the education system, nor the curriculum were revised since the 90s and this in turn lays its effects on the overall status of education in Lebanon since it should reflect the society's and country's status quo. Judging from this point, an education system, in all its elements should be flexible, dynamic, and progressive enough to keep up with the society's changes; however this is not the case of the Lebanese curriculum. This article aims to gather feedback from different stakeholders to help educators and officials in designing and developing a constructive curriculum which plays a key role in the development of not only education, but the society as well.

Purpose of the Study:

This research aims to determine the main features of education in Lebanon and its education system. Therefore, the following questions are ought to be answered:

1- What are the main historical characteristics of education in Lebanon?
2- How is the education in Lebanon organized?
3- Through time how was the curriculum in Lebanon updated or revised?
4- What are the stakeholders' views regarding the current curriculum?
5- What are the stakeholders' views regarding the current curriculum's objectives, contents, methods of teaching and evaluation?

Method

Research Design

This qualitative research uses the ethnographich design of collecting data, mainly interviews and focus groups with teachers from elementary classes, principals, students and their parents in two private and two public schools. This study focuses on the stakeholders' perspective about the latest curriculum in Lebanon, how and to which extent it is applied in classrooms. A qualitative research approach was the most applicable method for this study and the main purpose behind using the focus groups and interviews was to acquire information about the stakeholders' views, beliefs, experiences, opinions and thoughts related to the current curriculum in Lebanon.

Participants

The research consisted of four focus groups with 14 female teachers, 4 principals, 43 students, and 19 parents in four schools, two of which were private schools and two public schools whereas the average number of teachers' experience was 15 years in the city of Saida in southern Lebanon. The teachers teach English, Arabic, Math and Science where Math and Science are taught in English since early elemantry classes. The focus groups and interviews were held in the teachers' rooms with groups that range between 4 to 6 teachers at a time. Interwiews with principals were held in their offices and in the classrooms with the students. Also, since the researcher couldnot reach all the students' parents at their homes, the researcher sent the interview questions to the parents at home where they answered it and returned it back to the researcher. The prepared questions were approved by the researcher's supervisor and edited to comply with the research's aims and literature. The initial letter of the name of each participant was used to mark their ideas and the researcher acted as a moderator and guided the discussion

Research Instruments and Processes

Based on the literature review and previous studies, different set of open-ended questions for both interviews and focus groups were prepared for earch group of participants. Students and parents were asked 4 questions, while teachers and principles were asked 8-9 questions. The questions were all answered and it focused on the stakeholders' opinions regarding the currently used curriculum. The researcher explained the aim of these questions and its importance and was granted their approval. The interviews were taped recorded for accuracy with a signed approval obtained from the interviewees. The interviews were transcribed, translated to English, coded and summarized for analysis and investigation. Transcripts were carefully read and data was phrased and grouped into themes.

Data Analysis

The researcher opted for thematic analysis and a deductive approach to identify the stakeholders' perspectives regarding the currently used curriculum. Therefore, after transcribing and translating the interviewees' responses, the researcher orgainzed the data in a meaningful away for each question, gathered similar responses, included elaborated ones, generated intial codes, divided the data into themes and combined the responses under each theme. These steps were repeated for each group of the participants under respective titles.

Results

According to the transcripts and the summarized information from the focus groups and interviews, data was phrased and grouped into categories or themes according to the stakeholders' answers.

Teachers' opinions and suggesstions regarding the current curriculum

Participant S, B and L described the 1997 curriculum as "*old, not developed and weak*". She added "*teachers are forced to create new ideas or strategies since the Ministry of Education cannot support public schools financially as it should be*". Participant F stated that "*the curriculum is loaded with information which focuses on memorization and textbooks are loaded with either too little exercises or too much questions. It is not designed according to Bloom's level thinking skills therefore students suffer academically*". Participant S who is a second grade English Language teacher described the reading texts as too long and unrelated to the students' real life. She added "*there is a gap between the curriculum and the students' real life and not all students reach the assigned objectives. Objectives are random and not suitable for the grade level. For instance, not only topics are different from the students' life but also character or street names in reading books are also different than that of the Lebanese community."* Participant D and G added "*questions are typical and repeat from one lesson to another where sometimes every exercise has a different objective. Some lessons have more than 10 or 12 set of exercises and we cannot finish it all*." In addition, Participants K, M, and R stated that within the curriculum itself not all objectives are related to each other, neither related to the textbooks. For example, Independence Day and its related objectives are stated in the national curriculum but absent in students' textbooks. "*Therefore, we can determine the presence of a gap between the curriculum, its specific objectives and textbooks. We need more exercises and activities that are related to the comprehension, application, and synthesis levels of Bloom's cognitive domain.*" Further, some teachers explained that the content is not appropriate to our reality at all where titles might look related and beneficial but on the other hand the content does not relate to the students' life.

Gaps and problems faced by teachers

Teachers emphasized the presence of gaps in the curriculum content on several levels; objectives, textbook content, photos, maps, statistics, and concepts. Participants S, F and M stated that the curriculum needs to be developed and reorganized urgently and resources need to be addressed and met. Further, Teachers stated that there is a scope-and-sequence problem since there is a gap between cycle 1 (grades 1, 2, and 3), cycle 2 (grades 4, 5 and 6) and cycle 3 (grades 7, 8, and 9) and the absence of grammar books in some of these grades. Teachers stated that while their teaching methods are old, they lack resources and have to search the internet for new strategies but this factor is related to each teacher and his/her own personal development and personal efforts. "*Students' face difficulties in all subjects and teachers do not rely on the state's textbooks. We create our own worksheets relying on different resources, to adapt it to their own. According to them the content is dry, huge and incoherent, also some topics are repeated over the years and some important topics are not included at all*", participant F stated.

Teachers' suggestions to improve the curriculum

Teachers collectively agreed that students need to learn more about ethics and moralities, and how to uphold responsibilities of their actions. Some teachers stated that it is important for students to take English speaking courses, mental math classes, social awareness classes, read new Arabic and English texts and solve higher level thinking exercises. Also, teachers stressed the importance of developing the curriculum as soon as possible in order to avoid the problems they are facing. Lastly, teachers highlighted the importance usage of diverse passages since classes are not inclusive to Lebanese nationals only.

Teachers' confidence in the current curriculum

Upon being asked about their faith in the Lebanese curriculum some participants said it depends on the school's education staff, social environment and therefore differs from one school to another. Another group of teachers said if they had to enroll their children in public schools, then they would be forced to compensate for the present gaps. However, some teachers expressed that they would enroll their children in schools which teach the national curriculum after the second cycle (after the sixth grade). Other teachers said it depends on the economic circumstances but still they would compensate for the gaps at home.

Students' opinions and suggesstions regarding the current curriculum

As stated earlier several focus groups with students were made and it was one of the most enjoyable focus groups during this research since the students revealed a great level of awareness and consciousness. "*We feel too much pressure on us and the presence of too much information we need to learn and memorize. We always feel short of time and we do not like what we learn since it is really outdated and our world is changing. If we fall sick and do not attend a class on time, we feel that we missed a lot of information which we cannot compensate. We learn a lot of topics that are not directly related to our society. We like to learn more about topics related to our life right now like robotics, technology, translation, new languages, and music for example. Further, some concepts in civics education for example are merely theoretical and detached from our society. Some lessons are better seen as general information to be learned, not as a major element in the official exams which determine our future. Also, since the Lebanese community is rich in its diversity the curriculum should take into consideration the presence of Palestinian students in social studies and civics lessons" students said. Others added, "we would like to take self-defense courses, information about other cultures, first aid, and social skills. We are learning about life in school while we need to live it. Moreover, through education we learn about topics in the curriculum that are not present in university education in addition to the gap between national tests and our books. Improving the curriculum should not be about omitting or adding lessons, but on improving and developing it*" students concluded.

Principals' opinion and suggesstions regarding the current curriculum

Participant B stated that the curriculum's general objectives are suitable but it has some discrepancies especially regarding the transition from one grade to another. According to participant H, curriculum is good to a certain extent but we face problems within the textbook itself. According to him, the curriculum lacks motivation and variety of exercises and texts and prohibits the students from a positive interaction with each other. "*In public schools we suffer from the lack of resources and visual aids therefore teachers are forced to search for new resources whether by* *using the internet or by using private school textbooks to adapt the material to fit the class and students' level. Regarding the evaluation tools, it only assesses the low-level skills of the cognitive domain and does not take into consideration the psychomotor or affective domain. Our curriculum needs to be revised and updated*". Participant R stated that there is a gap between the objectives and the curriculum content since it focuses primarily on memorization. "*We also suffer from another problem since our textbooks are old and therefore not totally parallel with the national official exams. Some concepts are not convenient for the students' age or grade level*" she added. Further, Participants G and H added "*with the faulty arrangement of lessons and between the classes, the curriculum needs to be developed to be aligned with the students' real life and to keep pace with our current life*."

Gaps and problems faced by teachers from the principals' perspectives

All principals agreed that dealing with the curriculum and content gaps is a personal effort in addition to the presence of a gap between the official exams and the curriculum. Further, the principals highlighted the presence of another problem which is the number of special case students in classrooms. Also, teachers are forced to compensate for the lack of exercises and texts in textbooks. In addition, the number of students (40 – 45 students) in classes need to be decreased.

Principals' confidence and belief in the current curriculum

Principal R stated that there are several gaps with the curriculum and its content and therefore would prefer to enroll their children in private schools which use up-to-date curriculum. Another principal stated that they would enroll their children in school that use the state curriculum after they finish their elementary education. Principal B said they are not strongly interested in the state curriculum while principal G said they would enroll their children in state schools but compensate the academic difference at home.

Principals' suggestions

Principals expressed the need to omit old lessons that have no benefits. "*As a father I want my children to learn something that benefits them in their life, work and future. I do not care about memorization. Education should build the students' characters, and teach them how to uphold responsibilities of their actions in addition to teaching students' discipline, values, morals and ethics. Curriculum should include topics related to everyday life, technology and topics students are interested in. We can delete some lessons from the history or philosophy books and use new maps and statistics for geography lessons for example*" said principal H.

Parents' opinion and suggestions regarding the current curriculum

Majority of the interviewed parents agreed that the curriculum has become old, overloaded and needs to be revised and updated. Our curriculum is detached from reality and the students' daily life. It focuses on memorization of information and not acquiring skills needed to deal with life's challenges. They added, "*there is a gap between the curriculum and the national exams on one side, and a gap between the curriculum and university education. Teachers rely on worksheets and extra exercises." Another parent added "we want curriculum to focus on scientific subjects, omit some unnecessary history lessons, revise civic education in a way that is aligned with reality, use 21st century skills, teach music, acting or drama classes, or sports in professional ways. We need to focus on social* *activities and extracurricular activities, avoid memorization and learn new languages like Turkish, German, or Spanish*", concluded.

Parents' opinion regarding the problems faced by their children

Several parents stated that some lessons are hard and a tutor is needed almost all of the time. There is too much pressure on students and a great load of memorization on their children. Their children feel stressed and pressured especially that there is quite a difference between the books and test content.

Parents' suggestions regarding the current curriculum

Parents stated that their children should be able to choose the subjects they want to learn. "Curriculum needs to be revised and updated, some lessons should be omitted from several subjects and technological development should be followed" one parent stated. Parents want educators and programmers to communicate with students and ask them about their interests and needs. "*Teachers need to use new methods of instructions, use technology and social media and check the curriculum in developed countries and adapt it to ours and our society*" one mother concluded.

Discussion, Conclusion & Recommendations

Discussion

Education always plays a significant role in the development of any country. Based on the literature review, we can say that education in Lebanon has had a religious dimension which, along with other factors like the civil war, affected its development and caused it to suffer from several interconnected problems. This matter can be identified by the absence of any tangible curriculum development efforts through the years. Nonetheless, even though education in Lebanon remained steadfast in the face of many dilemmas and challenges, but also the lack of development resulted in a series of negative consequences which was discussed through the paper. On the other hand, based on the results of the focus groups and interviews, a change in the curriculum structure can be seen as a demanding need which needs to be met. Another issue that was also identified through the research is the loss of people's faith in public education, but at the same time, it is their only resort during hard financial times.

Conclusion

Since the Ottoman period and education in Lebanon took a religious dimension with the entrance of any missionaries and religious schools. Along with the unstable political and economic situations, the aftermath of these factors was seen after the 1975 civil war where education became a tool for social and sectarian segregation. Education which is supposed to be a tool for social reconstruction became a tool for social division. Currently the curriculum in Lebanon is 23 years old, textbooks, information, pictures, statistic are old and problematic. Also, there is a great reliance on memorization. Content design is subject based and it gives authority to the textbook and the teacher. Public schools and their students are the victim of this negligence. Further, we cannot forget the gaps between the grade or the cycles neither we cannot ignore the absence of any clear philosophy of education in Lebanon and even if it is present it is not translated in the curriculum. Also, students like to have the freedom of choice to decide what to study and the lack of resources and the absence of any updated content hinders any development of education. All stakeholders' opinion emphasized one main idea; the Lebanese curriculum needs to be revised urgently since it became detached from the students' reality, interests and needs. Teachers emphasized the use of the 21st century skills in today's classrooms to improve the students' analysis, performance and problem-solving skills. Further, they added that the guidance and counseling department from the Ministry of Education review, edit the exams and provide their opinion, suggestions and advice. Students and their parents expressed their need to use a curriculum which resembles them and their life right now, not decades ago. Finally, principals and teachers' perspectives revealed an alarming issue which needs to be probed cautiously; how to restore faith and confidence in the public education sector in Lebanon.

Recommendations

1- A clear philosophy should be adopted along with it the country's general objectives should be determined.
2- Needs analysis should be implemented and it should include the students' individual needs, the society's and the needs of the subject matter itself.
3- Objectives of each cycle, subject and lesson should be revised and all of Bloom's level should be taken into consideration.
4- Content has to be updated and a suitable content design should be chosen.
5- Learning experiences should be updated, new strategies and methods should be implemented.
6- Contemporary evaluation techniques like portfolio, performance assessment, and project-based assessment should be used.
7- Curriculum should constantly be evaluated in parallel with new education trends.
8- Educational policies should be implemented as soon as it is adopted.

References

AlAbtah, S. (2016, November 21). *Lebanon 200 years of years of competition between sects for pioneering education.* Asharq AL-awsat, p. 8.

Bankmed. (2014). *Analysis of Lebanon's education sector*. Beirut, Lebanon: Market and Economic Research Division. https://www.bankmed.com.lb/BOMedia/subservices/categories/News/20150515170635891.pdf

Baraldi, C., & Corsi, G. (2017). Self-descriptions in the education system. In *Niklas Luhmann* (pp. 85-101). Springer, Cham.

Center of Educational Research and Development. (1997). Curriculum Decree & General Target. CRDP.

Council of Development and Reconstruction. (2011). CDR annual report. CDR. http://www.databank.com.lb/docs/CDR%20annual%20report%202011.pdf retrieved on 20 November 2019.

Council of Development and Reconstruction. (2015). *CDR annual report.* CDR.

European Commission. (2017). *Overview of the Higher Education System Lebanon*. https://eacea.ec.europa.eu/sites/eaceasite/files/countryfiches_lebanon_2017.pdf

Frayha, N. (2009). The negative face of the Lebanese education system. *Lebanon Renaissance*, 1-5.

Karam, G. (2006). Vocational and technical education in Lebanon: strategic ıssues and challenges. *International Education Journal*, *7*(3), 259-272.

Krayem, H. (1997). The Lebanese civil war and the taif agreement. *Conflict resolution in the Arab world: Selected essays*, 411-436.

McGettrick, B. J. (2009). Planning, organization, and administration of education. *Quality of Human Resources: Education-Volume I*, 105.

Nahas, C. (2009, April). Financing and political economy of higher education in Lebanon. In *Economic Research Forum* (Vol. 41, No. 1, pp. 69-95).

Nazarian, G. P. (2013). *A Common Vision: Contesting History and Education in Postwaar Lebanon* [Master's thesis].

Nuffic. (2016). *Education System Lebanon described and compared with the Dutch system*. https://docplayer.net/50729823-Education-system-lebanon-the-lebanese-education-system-described-and-compared-with-the-dutch-system.html

Rebore, R. W. (2001). *Human resources administration in education: A management approach*. Allyn & Bacon, A Pearson Education Company, 75 Arlington Street, Boston, MA 02116.

Shuayb, M. (2016). Education for social cohesion attempts in Lebanon: Reflections on the 1994 and 2010 education reforms. *Education as Change*, *20*(3), 225-242.

Tabbarah, B. (1997). The Lebanese constitution. *Arab LQ*, *12*, 224.

The Lebanese Parliament. (2004). National agreement document - Taif Agreement. https://www.un.int/lebanon/sites/www.un.int/files/Lebanon/the_taif_agreement_arabic_version_.pdf

The Republic of Lebanon. (1960). The Lebanese Constitution: A reference edition in English translation. https://www.presidency.gov.lb/English/LebaneseSystem/Documents/Lebanese%20Constitution.pdf

Yaacoub, N., & Badre, L. (2012). *Education in Lebanon* (3). Statistics in Focus (SIF), Central Administration of Statistics. https://www.cas.gov.lb/images/PDFs/SIF/CAS_Education_In_Lebanon_SIF3.pdf 15 November 2019.

Attachments

Interview Questions

Teachers / Principles:

1- What is your personal opinion regarding the curriculum content you teach? objectives? teaching methods? evaluation techniques you use?

2- Are there any topics that should be deleted? gaps?

3- If you would like to add/delete any content on the curriculum what would it be?

4- Are there any gaps in the content that need to be addressed?

5- Is the scheduling (organizing of the content) reasonable?

6- What are the greatest problems you face when teaching the content?

7- What would you like to teach your students if the curriculum were to be developed? Suggestions?

8- If had a son/daughter enrolled in the public school, would you be satisfied with the curriculum? Why or why not.

9- (For principles only) What is the teachers' opinions and problems they face or express to you as the principle?

Parents:

1- What is your opinion regarding the curriculum your children are learning? curriculum content? teaching methods? evaluation techniques? resources?

2- What would you like your children to learn? any new topics?

3- How do you describe the curriculum your children are learning?

4- What are your suggestions regarding the curriculum your children are learning?

Students:

1- What is your opinion regarding what you are studying? Do you like it? dislike it?

2- Describe the curriculum you are studying in some words.

3- What are the problems you face in class or while studying at home?

4- What do you like to study or what subjects/lessons you would like to omit?

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: May 22, 2021
Accepted: June 25, 2021
http://dergipark.org.tr/rep

e-ISSN: 2602-3733

June 2021 ◆ 5(1) ◆ 102-117

Research Article

Published: 06.30.2021

An Investigation of Social and Emotional Loneliness in Young Adults in terms of Difficulties in Emotion Regulation

Vildan Saruhan[1]
Istanbul Aydın University

Müge Yüksel[2]
Marmara University

Abstract

In this research, it was attempted to explain the predictive effect of difficulties in emotion regulation on social and emotional loneliness. It was especially aimed to investigate the effect on loneliness of difficulties in using the appropriate emotion regulation strategies in understanding, accepting and controlling the emotions and behaving accordingly. In this study where the correlational survey model was used, data was collected from 552 young adults studying in different faculties and departments of a private university located in the city of Istanbul. 354 participants (64.1%) were female and 198 participants (35.9%) were male young adults aged between 19-25. Measurement tools were Social and Emotional Loneliness Scale and the Difficulties in Emotion Regulation Scale. Analysis results demonstrated that social and emotional loneliness exhibited a significant difference between genders while the difficulties in emotion regulation did not exhibit a significant difference between genders. Significant correlations were found between social and emotional loneliness and difficulties in emotion regulation and its subscales. The results of stepwise multiple regression analysis showed that difficulties in using the appropriate emotion regulation strategies, understanding the emotional reactions and awareness of emotional reactions were a predictor of social and emotional loneliness. Findings were discussed in accordance with the literature. Suggestions for researchers and field practitioners were listed.

Emotional loneliness • Difficulties in emotion regulation • Social loneliness

[1] **Correspondance to:** Aydın University, Faculty of Education, Istanbul, Turkey, E-mail: vildansaruhan3@gmail.com / vildansaruhan@aydin.edu.tr **ORCID**: 0000-0001-8856-5652
[2] Marmara University, Atatürk Faculty of Education, Istanbul, Turkey, E-mail: muge.yuksel@marmara.edu.tr **ORCID**: 0000-0002-7425-2716

Citation: Saruhan, V., & Yüksel, M. (2021). An investigation of social and emotional loneliness in young adults in terms of difficulties in emotion regulation. *Research on Education and Psychology, 5*(1), 102-117.

As social relationships are the essence of human life, loneliness is a major difficulty in human life that has always been investigated (Russell, Peplau & Cutrona, 1980). Establishing and maintaining lasting, positive and significant interpersonal relationships is an important impulse for people. Fulfilment of this impulse depends on pleasant interactions with other people and the permanence of these interactions (Baumeister & Leary, 1995). The direction of people's behaviors –being close to or detached from other people– is shaped in line with the interactions with other people and the feedback received. Individuals who feel accepted and loved by other people will be aware of the presence and support even when they are alone. However, if they feel not accepted, not only the direction of their behaviors but also the quality of their behaviors will change, they will feel estranged, lonely and hopeless (Horney, 2013).

Throughout history, people had a tendency to live in crowded groups for shelter and help purposes. Thus, being disconnected and isolated from other people poses a vital danger. Loneliness is a signal driving the individual to modify his or her behaviors in order to avoid getting hurt. Therefore, loneliness serves as a signal that encourages individuals to restore the connections they need for survival and improvement. When remain unresolved, loneliness not only negatively affects social relationships but also increases the physical symptoms and causes individuals to feel worn-out (Cacioppo & Hawkley, 2009). People always make efforts to avoid loneliness which is a painful and scary feeling (Geçtan, 1999). Individual differences such as sociodemographic factors, social roles, quality and quantity of social contact, humor are significant factors that are determinant in explaining of loneliness (Cacioppo & Hawkley, 2009).

Studies on loneliness have brought along different definitions of loneliness. Basically, it is defined as an unbearable, upsetting feeling that can be experienced by every individual during certain periods (Perlman & Peplau, 1981; Sadler, 1978). De Jong-Gierveld (1998) defines loneliness as an unpleasant or inadmissible lack of quality of certain social relationships and states that loneliness encapsulates the perceptions, experiences and evaluations of individuals. Sadler (1978) points out that people live in a world where they always get separated from the people they love or leave them behind. Sadler emphasizes that individuals experience painful changes caused by significant attachment losses and that loneliness is a major problem for many people. It is reported that loneliness which is described as the deprivation perceived by an individual in relationships with his or her social circle can be both quantitative and qualitative (Russell, Cutrona, Rose & Yurko, 1984). Social relationships protect individuals from loneliness and qualities such as the intimacy and frequency of interaction may vary throughout a person's lifetime (Nicolaisen & Thorsen, 2017). Young adulthood is a period in which individuals build intimate relationships and unite their identity with that of other person(s). In this period when trust and mutual satisfaction is built, feeling anxious about being with someone may cause individuals to avoid establishing intimate relationships. This avoidance may lead the person to feel lonely. Loneliness may be felt instead of building intimate relationships that must be achieved in this period (Öztürk & Uluşahin, 2014). In a review of studies conducted with loneliness, many studies indicated loneliness was studied in terms of variables such as social support (Şahin, 2019; Erdeğer, 2001), life satisfaction (Kaya & Gokler, 2017; Özkaya, 2017), psychological resilience (Kılıç & Alver, 2017) and hopelessness (Özkaya, 2017).

Decreasing and preventing loneliness is important for an individual's health and well-being (Nicolaisen & Thorsen, 2017). The ability to build healthy and balanced relationships is significant for an individual's adaptation to life. Emotions, thoughts, behaviors and physical reactions are a whole in building such relationships and one of the most important components of this whole is emotions (Koçak, 2005). Emotions have a great number of functions that are important for human life such as enabling social interaction, behavioral responses, decision-making, sensory perception, attention to the environment and improving the memory. However, if these helpful emotions are experienced very profoundly for a long time or if they are not situationally appropriate, they may harm the individual. In order to avoid the harmful effect of emotions that shape the human behaviors, emotion regulation processes must be used (Werner & Gross, 2010).

Emotion regulation is defined as the adoption of adaptive strategies by an individual to cope with an undesirable level of intense emotions (Leahy, Tirch & Napolitano, 2011). However, emotion regulation does not only refer to putting an end to the unsettling situation. It consists of regulations that regulate the individual's functions and encourage them to adapt to both momentary and ongoing living conditions. It is related not only to decreasing the intensity or frequency of emotions, but especially to the capacity of generating and maintaining emotions to impress and communicate with people especially through coordination with others' emotions (Cole, Michel & Teti, 1994). In other words, it can be said that emotion regulation is comprised of internal and external processes responsible for monitoring, evaluating and modifying an individual's intense and temporary emotional reactions (Thompson, 1994).

Gratz and Roemer (2004) mentioned the following concepts as effective emotion regulation skills: (a) awareness and understanding of emotions, (b) acceptance of emotions, (c) ability to control impulsive behaviors and behave in accordance with the desired goal when experiencing negative emotions, (d) ability to use situationally appropriate emotion regulation strategies to modulate emotional responses as desired in order to meet individual goals and situational demands. The absence of any or all of these concepts indicates the presence of difficulties in emotion regulation. In a review of studies on the difficulties in emotion regulation, it was observed that the difficulties in emotion regulation was investigated in terms of such variables as early maladaptive schemas (Akhun, 2012; Eldoğan, 2012), social phobia (Eldoğan, 2012), addiction (Budak, 2017; Karagöz & Dağ, 2015; Süsen, 2017), attachment (Sarıbal, 2017), personality disorders (Salsman & Linehan, 2012; Şaşmaz, 2014), trauma (Ehring & Quack, 2010; Gürgen, 2017).

Rationale and Purpose of the Study

Individuals assume diverse roles and responsibilities during this period when they go through many changes as part of their developmental process and build social relationships and intimate relationships. In addition to the changes in behaviors and thoughts as a result of social development and social interactions, emotional changes are also observed. It is a major difficulty for an individual to be in a disturbing and undesirable state of loneliness. In such cases, it is highly important for the individual to be aware of the emotion underlying the feeling of loneliness and regulate the relevant emotion(s). Awareness of internal and external demands requires being aware of the signals acquired through those emotions. It is significant in the field of emotion regulation how individuals behaviorally and cognitively regulate their emotions, which emotion regulation strategies they use and which of the strategies used are dysfunctional in emotion regulation.

When the literature is reviewed, studies in which difficulties of emotion regulation and loneliness are studied together have shown that these variables are food addiction (Tatsi, Kamal, Turvill & Holler, 2019), drug abuse (Nikmanesh, Kazemi & Khosravi, 2015), eating disorders (Southward, Christensen, Fettich, Weissman, Berona & Chen, 2014) and experiential avoidance (Shi, Zhang, Zhang, Fu & Wang, 2016). Since studies both in Turkey and abroad investigated the emotion regulation in mood disorders (Şaşmaz, 2014; Mauss, Wilhelm & Gross, 2004; Mennin & Fresco, 2010) and studies that investigating difficulties of emotion regulation and loneliness together (Eres, Lim, Lanham, Jillard & Bates, 2021; Tatsi, Kamal, Turvill & Holler, 2019; Nikmanesh, Kazemi & Khosravi, 2015) shows that it is important to examine loneliness in terms of difficulties of emotion regulation. The main focus of the study was to examine to what extent any or more of the difficulties of emotion regulation predict loneliness, especially in the young adulthood process. As a result, within the broad framework of emotions, it is important to investigate the loneliness experienced by young adult university students in terms of effective emotion regulation components in order to ensure a healthier developmental period and a higher quality of life. It is considered that it is highly significant to conduct studies on how the difficulties in emotion regulation that may be experienced in the absence of any of the effective emotion regulation components can affect the individual's loneliness. Thus, it was aimed to examine the social and emotional loneliness experienced by young adult university students in family, intimate romantic relationships and relationships with friends in terms of the difficulties in emotion regulation. In line with this purpose, answers were sought to the following questions:

1. Do social and emotional loneliness and difficulties in emotion regulation differ significantly between genders?

2. Is there a significant relationship between the social and emotional loneliness and the difficulties in emotion regulation and its non-acceptance, goals, strategies, impulses, clarity, awareness subscales?

3. Do the difficulties in emotion regulation scale's non-acceptance, goals, strategies, impulses, clarity, awareness subscale scores significantly predict the social and emotional loneliness scores?

Method

In this section, there are research design, research group, data collection instruments, data collection and data analysis chapters.

Research Design

In the present study, the correlational survey model was used to examine the dependent variable of social and emotional loneliness in young adulthood in terms of the independent variables of the difficulties in emotion regulation subscales. Correlational survey models are used to determine the correlation between two or more variables and the extent of the correlation (Fraenkel, Wallen & Hyun, 2011).

Study Group

The research group consisted of young adult university students studying in different grades of various departments of Faculty of Education, Faculty of Engineering, Faculty of Economics and Administrative Sciences, Faculty of Arts and Sciences and Faculty of Health Sciences of a private university in Istanbul during the second semester of 2017-2018 academic year. 522 university students aged between 19-25 were included in the study. 354 of participants (64.1%) were female while 198 of them (35.9%) were male. The socio-demographic characteristics of the participants are shown in Table 1 to give information about the research group.

Table 1

Socio-Demographic Characteristics of the Participants

Variables	Groups	N	%
Gender	Female	354	64.1
	Male	198	35.9
Mother Education Level	Primary School and under	160	29
	Secondary School	105	19
	High School	203	36.8
	University and over	84	15.2
Father Education Level	Primary School and under	98	17.8
	Secondary School	89	16.1
	High School	211	38.2
	University and over	154	27.9
Residence	With family	382	69.2
	Alone at home	40	7.2
	With friends at home	58	10.6
	In dormitory	72	13

Research Instruments and Process

In this research, to measure the social and emotional loneliness levels Social and Emotional Loneliness Scale ; to measure the difficulties in emotion regulation processes The Difficulties İn Emotion Regulation Scale and personal information form was used.

Personal Information Form. This form containing information of age, gender, mother and father education level, place to stay for participants, was prepared by the researcher with the aim of get information about the participants.

Social and Emotional Loneliness Scale. Social and Emotional Loneliness Scale for Adults (SELSA) full version is a 37-item, 3-dimensional measurement tool developed by DiTommaso and Spinner (1993). In later years, its short version was prepared by DiTommaso, Brannen and Best (2004) who selected 15 items from the scale's original version. The 15-item short form was adapted to the Turkish culture by Çeçen (2007) and each subscale had 5 items. As part of the validity of the scale, Confirmatory factor analysis was performed. The results of the confirmatory factor analysis confirmed the three-factor structure of the scale and revealed that the fit indices ($\chi2$ = 385.92, df = 86; RMSEA = .02, GFI =.91, IFI = .92, CFI = .92) were at an acceptable level. When the scale was examined in terms of concurrent and discriminant validity, it was found strong relationships. Cronbach's Alpha internal consistency coefficient and test-retest reliability coefficient were calculated in order to test the reliability of the scale. Cronbach's Alpha internal consistency coefficient was calculated as .83 for the loneliness in romantic relationships subscale, .77 for the loneliness in family relationships subscale and .74 for the loneliness in social relationships subscale. Test-retest reliability coefficient for social, family and romantic sub-dimensions were .88, .83 and .91 respectively. In this scale, emotional loneliness is measured with loneliness in romantic relationships and loneliness in family subscales, while social loneliness is measured with loneliness in social relationships subscale (Çeçen, 2007).

The Difficulties in Emotion Regulation Scale. The difficulties in emotion regulation scale developed by Gratz and Roemer (2004) was adapted to the Turkish culture by Rugancı and Gençöz (2010). There are 6 subscales in the scale which are *awareness, clarity, non-acceptance, strategies, impulse* and *goals*. The scale is rated as a 5-point Likert type, and consists of 36 items. There are reverse items in the scale. When the factor structure is examined, one item was excluded from the scale because of the low load value. When this item was removed from the scale, it was observed that the Turkish form of the scale showed a construct validity similir with the original factor structure. Cronbach's Alpha internal consistency coefficient for the whole scale was found as .94. When examined in terms of sub-dimensions of the Turkish version of the scale, alpha coefficients were found to be .82 for the clarity, .90 for the goals, .90 for the impulse, .83 for the not accepting, .89 for the strategy and .75 for the awareness subscales. Test-retest reliability coefficient of the whole scale was found as .83. Test-retest reliability coefficients of sub-dimensions of the scale were .85 for the strategy, .72 for the awareness, .69 for the clarity, .68 for the impulse, .72 for the goals and .60 for the non-acceptence (Rugancı & Gençöz, 2010).

Data Collection Process

The neecessary permission to apply the measurement tools was received from the lecturers and the tools were collected by the researchers from the classrooms on a pre-determined day and time. The participants were informed about the content and significance of the study. Participation was voluntary and the importance of writing genuine and complete answers to the questions in the measurement tools was emphasized. The researcher was present in the classroom to answer any questions asked by the participants while filling in the measurement tools.

Data Analysis

The aim of this study is to explain the prediction level of social and emotional loneliness of young adults by the difficulties in emotion regulation scale and its subscales. Firstly, an independent samples t-test was done to determine whether social and emotional loneliness scores and difficulties in emotion regulation scores differed according to the gender variable. Pearson product-moment correlation analysis was conducted to examine the relationship between social and emotional loneliness and difficulties in emotion regulation subscales. Then, the stepwise multiple regression analysis was performed to determine the predictive effect of the difficulties in emotion regulation subscales on social and emotional loneliness. SPSS 15.0 package program is used for the analysis of data.

The presence of data loss and extreme values in obtained data was investigated using the standard z values [-3, +3], kurtosis and skewness coefficients (+1,-1) (Tabachnick & Fidell, 2013). In addition, prior to the stepwise multiple regression analysis, the hypotheses for normality and linearity between predictive variables and predicted variables were examined using graphs. In order to detect any multicollinearity problem among the predictive variables, VIF (Variance Inflation Factor), CI (Condition Index) and Tolerance value were checked. No multicollinearity problem was observed among predictive variables (VIF<10, CI<30, Tolerance value>.10) (Çokluk, Şekercioğlu & Büyüköztürk, 2012).

Results

In this section, we explain the findings obtained as a result of statistical analysis conducted in line with the study problems.

Table 2 shows the results of Independent Samples t-test conducted to determine whether social and emotional loneliness scores and difficulties in emotion regulation scores of young adult university students participating in the study differed according to the gender variable.

Table 2

Results of Independent Samples T-Test Applied to the SELS and DERS Scores for Gender

Variables	**Groups**	**N**	$\bar{x}$	**Ss**	$Sh_{\bar{x}}$	**T**	**sd**	**p**
SELS	Female	354	41.13	15.70	.83	-2.52	550	.012
	Male	198	44.61	15.18	1.07			
DERS	Female	354	84.67	21.42	1.13	-.150	550	.881
	Male	198	84.95	20.51	1.45			

(SELS: Social and Emotional Loneliness Scale; DERS: Difficulties in Emotion Regulation Scale)

As seen in Table 2, it was detected that the social and emotional loneliness scores of young adults exhibited a significant difference for the gender variable (t=-2.52; p<.05) but showed no significant difference for the difficulties in emotion regulation scores (t=-.150; p>.05).

Table 3 presents the findings of Pearson correlation analysis conducted to determine whether there was any significant correlation between the social and emotional loneliness scores and the difficulties in emotion regulation scale's non-acceptance, goals, strategies, impulses, clarity, awareness subscale scores of young adult university students participating in the study.

Table 3

Correlation Analysis Results for Between Social and Emotional Loneliness and Difficulties in Emotion Regulation

The Difficulties in Emotion Regulation Scale Subscales	Social and Emotional Loneliness Scale Scores		
	N	r	p
Difficulties in Emotion Regulation	552	.342*	.000
Clarity	552	.255*	.000
Non-Acceptance	552	.266*	.000
Goals	552	.145*	.000
Impulse	552	.244*	.000
Awareness	552	.157*	.000
Strategies	552	.340*	.000

**p*<.01

As shown in Table 3, the Pearson correlation analysis results demonstrate that there is a positive, moderately significant correlation between emotion regulation scores and social and emotional loneliness scores (r=.342; p<.01). In terms of the difficulties in emotion regulation subscales, a positive significant correlation was detected between social and emotional loneliness and "clarity (r=.255; p<,01)", "non-acceptance (r=.266; p<,01)", "goals (r=.145; p<,01)", "impulse (r=.244; p<,01)", "awareness (r=.157; p<,01)" and "strategies (r=.340; p<,01)" variables.

A stepwise multiple regression analysis was conducted to determine the prediction level of social and emotional loneliness levels of young adult university students participating in the study by the non-acceptance, goals, strategies, impulses, clarity, awareness subscales of the difficulties in emotion regulation scale. Analysis findings are given in Table 4.

Table 4

Findings of Multiple Regression Analysis for the Prediction of Social and Emotional Loneliness Scores

	Predictive Variables	R	ΔR^2	B	SH_B	β	T	p
Difficulties in Emotion Regulation	Constant			20.466	2.691		7.606	.000
	Strategies	.340	.114	.638	.095	.293	6.705	.000
	Clarity	.026	.016	.499	.209	.102	2.384	.017
	Awareness	.008	.005	.398	.195	.096	7.606	.000
	R=.374	ΔR^2=.135						
	F(3.548)=29.782	p=.000						

As shown in Table 4, the stepwise multiple regression analysis was completed in three stages. It was observed that the three variables were significant predictors in terms of predicting social and emotional loneliness. In the first step, the "strategies" subscale that explained 11% of social and emotional loneliness scores was analyzed. In the second step, the "clarity" subscale that contributed to the explained variance the furthest was analyzed. The Clarity subscale explains 1.6% of the variance for social and emotional loneliness scores. In the third step, the "awareness" subscale that contributed to the explained variance the most was analyzed. The awareness subscale contributes to the variance for social and emotional loneliness scores by 0.5%. Regression coefficients indicate that the correlation between strategies, clarity and awareness subscales and social and emotional loneliness is positive. Strategies, clarity and awareness variables together explain 13.5% of the total variance for social and emotional loneliness. The regression equation for the prediction of social and emotional loneliness scores according to the regression analysis results is presented below.

Discussion, Conclusion and Suggestions

The purpose of this study was to investigate the social and emotional loneliness levels of young adult university students in terms of the difficulties in emotion regulation. The correlation between the difficulties in emotion regulation scale and each of its subscales and the social and emotional loneliness was presented and the extent to which social and emotional loneliness was predicted by each subscale was examined. Moreover, it was investigated whether social and emotional loneliness and the difficulties in emotion regulation exhibited a significant difference according to the gender variable. The correlational survey model was used to explain the correlation between social and emotional loneliness and difficulties in emotion regulation variables and to determine the predictive effect of emotion regulation on loneliness.

Analysis results showed that social and emotional loneliness was different between genders while the difficulties in emotion regulation was not different. A positive, significant correlation was found between the social and emotional loneliness level and the difficulties in emotion regulation scale and its subscales. It was also detected that strategies, clarity, awareness subscales of the difficulties in emotion regulation scales were major predictors of social and emotional loneliness. A review of literature studies demonstrates that loneliness exhibited a difference between genders in some studies (Borys & Perlman, 1985; Deniz, Hamarta & Ari, 2005; Demirli & Demir, 2014; Kılıç & Karakuş, 2016; Özkaya, 2017; Salimi, 2011), while no significant difference was detected between genders in some studies (Green, Richardson, Lago & Schatten-Jones, 2001; Kılıç & Alver, 2017; Oruç, 2013; Pehlivan, 2017; Şeremet, 2019). High levels of loneliness in men can be explained by the fact that men have more difficulty in opening themselves up and expressing themselves compared to women. There are also studies with supportive findings revealing that the difficulties in emotion regulation showed no difference between genders (Akhun, 2012; Süsen, 2017; Şeremet, 2019). However, some studies reveal a significant difference between genders in terms of the difficulties in emotion regulation subscales (Çalışkan, 2017; Gratz & Roemer, 2004; Gündüz, 2016; Neuman, van Lier, Gratz & Koot, 2010; Pektaş, 2015). There are no studies that clearly indicate in which subscales the difficulties in emotion regulation exhibit a significant difference between genders. Thus, considering the total scores, it can be said that the difficulties in emotion regulation scores does not differ between genders.

In the study, it was detected that as the scores from the difficulties in emotion regulation subscales (lack of awareness of emotional reactions, not understanding and not accepting the emotional reactions, limited access to effective perceived emotion regulation strategies, difficulty in impulse control while experiencing negative emotions and difficulty in engaging in goal-directed behavior) increased, social and emotional loneliness increased as well. When the literature examined, it is seen that the emotional awareness and clarity sub-dimensions of difficulties in emotion regulation are associated with loneliness (Eres, Lim, Lanham, Jillard & Bates, 2021; Nikmanesh, Kazemi and Khosravi, 2015). There are other supporting findings in the literature studies. Yıldız (2016) found that the loneliness levels of young individuals increased as their internal and external dysfunctional regulation levels increased. Şeremet (2019) investigated the mediating role of the difficulties in emotion regulation in the relationship between attachment and loneliness and detected a positive correlation between loneliness and each subscale of the difficulties in emotion regulation scale. This result supports the finding that individuals with high scores of difficulties in emotion regulation also have high loneliness scores. In literature studies, such results as the significant correlation between difficulties in emotion regulation and personality disorders (Akhun, 2012; Dvorak et al., 2014; Glen & Klonsky, 2009; Salsman & Linehan, 2012; Şaşmaz, 2014) and the common occurrence of emotional deprivation in personality disorders (Young, Klosko & Weishaar, 2009) support the correlation between difficulties in emotion regulation and loneliness. Qualter, Quinton, Wagner and Brown (2009) demonstrated a direct correlation between difficulty in identifying emotions and loneliness. They reported that difficulty in identifying emotions and talking about emotions was a process parallel with and caused by loneliness. They explained this finding by stating that feeling lonely in a social circle and family prevented individuals from implementing and improving their emotional skills. These findings support the correlation between loneliness and difficulties in emotion regulation.

It was observed that difficulties in using appropriate emotion regulation strategies (strategies), understanding the emotional reactions (clarity) and awareness of emotional reactions (awareness) predicted the social and emotional loneliness. In a review of studies, it was seen that very few studies directly addressed the difficulties in emotion regulation and loneliness. In a study by Şeremet (2019) with university students, it was found that the strategies, non-acceptance and awareness subscales of the difficulties in emotion regulation scale predicted the loneliness. This finding is a supportive result in terms of strategies and awareness subscales and can be interpreted for each subscale. In the strategies subscale, inability to use the approapriate emotion regulation strategy will affect how individuals cognitively evaluate the circumstances that makes them feel bad and the direction of their behavioral preference between avoiding or fighting the experience. In the awareness subscale, not being aware of their emotional reactions will cause them to disregard or ignore their feelings about experiences or not live their emotions sufficiently. In a review of indirectly related studies, Nikmanesh, Kazemi and Khosravi (2012) revealed that the difficulties in emotion regulation predicted the personality disorder and depression. They reported that individuals with difficulties in emotion regulation had a tendency to take risky decisions and have difficulty in controlling maladaptive behaviors. Studies indicating that loneliness had a mediating effect on the correlation between the difficulties in emotion regulation and eating disorders (Southward et al., 2014) and the difficulties in emotion regulation had a mediating effect on loneliness level (Yıldız, 2016) also support the study finding. Therefore, study findings demonstrate that the difficulties experienced by individuals in emotion regulation explain the loneliness.

Our study has a number of limitations. The first limitation was that only the young adults studying in university were included in the study. An individual’s experiences, emotional processes, potential difficulties in expressing and organizing the emotions are influenced by the family environment, social structure and social environment. Thus, it is thought that broadening and diversifying the sample by taking into consideration the potential effects of different sociodemographic variables will provide more explanatory and significant findings on the scope of and correlation between loneliness and difficulties in emotion regulation. In addition, it is considered that the incorporation of variables such as the interpersonal relationship dimensions of emotional support, social support and emotional awareness into the process will be valuable for the findings of difficulties in emotion regulation. It can also be said that supporting the quantitative studies with qualitative study findings will provide more in-depth results and increase the explanatory power of the study. Practitioners, on the other hand, can organize workshops focused on emotion regulation for individuals experiencing social and emotional loneliness. Group work sessions focused on skill acquisition can be organized for each subscale of the difficulties in emotion regulation in order to prevent and reduce loneliness. Study findings regarding loneliness and difficulties in emotion regulation can be evaluated in educational institutions as part of prevention and intervention programs. Psychoeducation studies on emotion regulation skills and difficulties in emotion regulation can be conducted especially in the psychological counseling departments of universities.

Ethic

This research was conducted in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and ethical standards.

Conflict of Interest

No conflict of interest was reported by the authors.

Funding

This research did not receive any grant from funding agencies.

References

Akhun, M. (2012). *The relationship of perceived parenting styles, early maladaptive schemas, self construal, separation-individuation, and difficulties of emotional regulation to psychological distress in Turkish university students* (Unpublished doctorate dissertation). Hacettepe University, Institute of Social Sciences.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497.

Borys, S., & Perlman, D. (1985). Gender differences in loneliness. *Personality and Social Psychology Bulletin, 11*(1), 63-74. doi:10.1177/0146167285111006

Budak, C. F. (2017). *Sociotropy-autonomy personality characteristics and emotion regulation difficulties as the predictors of internet addiction* (Unpublished master thesis). Işık University, Institute of Social Sciences.

Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences*, *13*(10), 447-454.

Cole, P. M., Michel, M. K., & Teti, L. O. (1994). The development of emotion regulation and dysregulation: A clinical perspective. The development of emotion regulation: Biological and behavioral considerations. *Monographs of the Society for Research in Child Development*, *59*, 73 –100. doi: 10.1111/j.1540-5834.1994.tb01278.x

Çalışkan, B. (2017). *The relationship between early maladaptive schemas, perceived maternal parenting style, emotion regulation difficulties and psyhological wellbeing* (Unpublished master thesis). Doğuş University, Institute of Social Sciences.

Çeçen, A. R. (2007). The Turkish short version of the Social and Emotional Loneliness Scale for adults (SELSA-S): Initial development and validation. *Social Behavior and Personality*, *35*(6), 717-734. doi:10.2224/sbp.2007.35.6.717

Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2012). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları* [In Multivariable statistics for social sciences: SPSS and LISREL applications]. Ankara: Pegem Akademi.

De Jong Gierveld, J. (1998). A review of loneliness: Concept and definitions, determinants, and consequences. *Review in Clinical Gerontology*, *8*, 73-80. doi: 10.1017/S0959259898008090

Demirli, A., & Demir, A. (2014). The role of gender, attachment dimensions, and family environment on loneliness among Turkish university students. *Journal of Psychologists and Counsellors in Schools*, *24*(1), 62-75.

Ditommaso, E., Brannen, C., & Best, L. A. (2004). Measurement and validity characteristics of the short version of the Social and Emotional Loneliness Scale for adults. *Educational and Psychological Measurement, 64*(1), 99-119. doi:10.1177/0013164403258450

DiTommaso, E., & Spinner, B. (1993). The development and initial validation of the Social and Emotional Loneliness Scale for adults (SELSA). *Personality and Individual Differences*, *14*, 127–134.

Dvorak, R. D., Sargent, E. M., Kilwein, T. M., Stevenson, B. L., Kuvaas, N. J., & Williams, T. J. (2014). Alcohol use and alcohol-related consequences: Associations with emotion regulation difficulties. *The American Journal of Drug and Alcohol Abuse, 40*(2), 125-130. doi:10.3109/00952990.2013.877920

Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior therapy, 41*(4), 587-598. doi:10.1016/j.beth.2010.04.004

Eldoğan, D. (2012). *The mediator role of emotion regulation difficulties on the relationship between early maladaptive schemas and the symptoms of social phobia in university students* (Unpublished master thesis). Hacettepe University, Institute of Social Sciences.

Erdeğer, N. (2001). *Examining the level of loneliness and social support of high school students* (Unpublished Master Thesis). Gazi University, Institute of Educational Sciences.

Eres, R., Lim, M. H., Lanham, S., Jillard, C., & Bates, G. (2021). Loneliness and emotion regulation: Implications of having social anxiety disorder. *Australian Journal of Psychology*, 1-11. doi:10.1080/00049530.2021.1904498

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2011). *How to design and evaluate research in education*. New York: McGraw-Hill Humanities/Social Sciences/Languages.

Geçtan, E. (1999). *Psikodinamik psikiyatri ve normaldışı davranışlar* [Psychodynamic psychiatry and abnormal behavior]. Metis Yayınları.

Glenn, C. R., & Klonsky, E. D. (2009). Emotion dysregulation as a core feature of borderline personality disorder. *Journal of Personality Disorders, 23*(1), 20-28. doi:10.1521/pedi.2009.23.1.20

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*, 41-54.

Green, L. R., Richardson, D. S., Lago, T., & Schatten-Jones, E. C. (2001). Network correlates of social and emotional loneliness in young and older adults. *Personality and Social Psychology Bulletin, 27*(3), 281-288. doi:10.1177/0146167201273002

Gündüz, H. (2016). *The relationship between mindfullness and emotion regulation among Turkish adults* (Unpublished master thesis). Nişantaşı University, Institute of Social Sciences.

Gürgen, A. (2017). *Research on the childhood traumas and emotional regulation difficulties of patients having alcohol use disorder: Cross-sectional controlled study* (Specialty thesis in Medicine). Çanakkale Onsekiz Mart University, Faculty of Medicine.

Deniz, M., Hamarta, E., & Ari, R. (2005). An investigation of social skills and loneliness levels of university students with respect to their attachment styles in a sample of Turkish students. *Social Behavior and Personality: An International Journal, 33*(1), 19-32. doi:10.2224/sbp.2005.33.1.19

Horney, K. (2013). *Çağımızın Nevrotik Kişiliği* [The Neurotic Personality of Our Time]. İstanbul: Sel Yayıncılık.

Karagöz, B., & Dağ, İ. (2015). The relationship between childhood maltreatment and emotional dysregulation in self mutilation: An investigation among substance dependent patients. *Arch Neuropsychiatr, 52*(1), 8-14. doi:10.5152/npa.2015.6769

Kaya, S., & Gokler, R. (2017). University students' loneliness and future time perspective as the predictors of their life satisfaction levels. *New Trends and Issues Proceedings on Humanities and Social Sciences, 3*(1), 338-345.

Kılıç, M., & Karakuş, Ö. (2016). The study of the relationships between social appearance anxiety, self-esteem and loneliness level among university students. *Journal of Human Sciences, 13*(3), 3837-3852.

Kılıç, Ş. D., & Alver, B. (2017). Üniversite öğrencilerinin yalnızlık düzeylerine psikolojik dayanıklılıkları arasındaki ilişkilerin bazı değişkenlere göre incelenmesi [Investigation of relationships between university students' psychological resilience to loneliness levels according to some variables]. *International Journal of Education Technology and Scientific Researches, 2*(3), 116-147.

Koçak, R. (2005). Duygusal ifade eğitimi programının üniversite öğrencilerinin aleksitimi ve yalnızlık düzeylerine etkisi [The effect of emotional expession of educational program upon alexithymia and loneiness level of universty students]. *Türk Psikolojik Danışma ve Rehberlik Dergisi, 3*(23), 29-45.

Leahy, R. L., Tirch, D., & Napolitano, L. A. (2011). *Emotion regulation in psychotherapy: A practitioner's guide*. Guilford Press.

Mauss, I., Wilhelm, F., & Gross, J. (2004). Is there less to social anxiety than meets the eye? Emotion experience, expression, and bodily responding. *Cognition and Emotion, 18*(5), 631-642. doi:10.1080/02699930341000112

Mennin, D. S., & Fresco, D. M. (2010). Emotion regulation as a framework for understanding and treating anxiety pathology. In A. M. Kring & D. M. Sloan (Eds.), *Emotion regulation in psychopathology* (pp. 356–379). New York, NY: Guilford Press.

Neumann, A., van Lier, P. A., Gratz, K. L., & Koot, H. M. (2010). Multidimensional assessment of emotion regulation difficulties in adolescents using the Difficulties in Emotion Regulation Scale. *Assessment, 17*(1), 138-149.

Nikmanesh, Z., Kazemi, Y., & Khosravi, M. (2015). Role of feeling of loneliness and emotion regulation difficulty on drug abuse. *International Journal of Medical Toxicology and Forensic Medicine, 5*(4), 185-91.

Nicolaisen, M., & Thorsen, K. (2017). What are friends for? Friendships and loneliness over the lifespan—From 18 to 79 years. *The International Journal of Aging and Human Development, 84*(2), 126-158. doi:10.1177/0091415016655166

Oruç, T. (2013). *Research on the relation between loneliness and automatical thoughts of university students related with psycholosocial variables* (Unpublished master thesis). Dokuz Eylül University, Institute of Education Sciences.

Özkaya, G. (2017). *Relationship between loneliness levels and hopelessness and life stisfaction of university students* (Unpublished master thesis). Haliç University, Institute of Social Sciences.

Öztürk, M. O., & Uluşahin, A. (2014). *Ruh sağlığı ve bozuklukları* [Mental Health and Disorders]. Nobel Tıp Kitabevleri.

Pehlivan, B. (2017). *The effects of university students' negative core beliefs, loneliness, attachment styles on eating attitudes* (Unpublished master thesis). Okan University, Institute of Social Sciences.

Pektaş, E. (2015). *The investigation of the relationship between perceived parental acceptance- rejection and depression and trait anxiety of university students: The mediator role of emotion regulation* (Unpublished master thesis). Hacettepe University, Institute of Social Sciences.

Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. *Personal Relationships, 3*, 31-56.

Qualter, P., Quinton, S. J., Wagner, H., & Brown, S. (2009). Loneliness, interpersonal distrust, and alexithymia in university students 1. *Journal of Applied Social Psychology*, *39*(6), 1461-1479. doi:10.1111/j.1559-1816.2009.00491.x

Ruganci, R. N., & Gençöz, T. (2010). Psychometric properties of a Turkish version of the Difficulties in Emotion Regulation Scale. *Journal of Clinical Psychology, 66*(4), 442-455. doi:10.1002/jclp.20665

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), 472-480.

Russell, D., Cutrona, C. E., Rose, J., & Yurko, K. (1984). Social and emotional loneliness: An examination of Weiss's typology of loneliness. *Journal of Personality and Social Psychology*, *46*(6), 1313. doi:10.1037/0022-3514.46.6.1313

Sadler, W. A. (1978). Dimensions in the problem of loneliness: A phenomenological approach in social psychology. *Journal of Phenomenological Psychology*, *9*(1), 157. doi:10.1163/156916278X00078

Salimi, A. (2011). Social-emotional loneliness and life satisfaction. *Procedia-Social and Behavioral Sciences*, *29*, 292-295. doi:10.1016/j.sbspro.2011.11.241

Salsman, N. L., & Linehan, M. M. (2012). An investigation of the relationships among negative affect, difficulties in emotion regulation, and features of borderline personality disorder. *Journal of Psychopathology and Behavioral Assessment*, *34*(2), 260-267. doi:10.1007/s10862-012-9275-8

Sarıbal, İ. (2017). *The relation between attachment styles and interpersonal relationships, emotion regulation difficulties, and anxiety* (Unpublished master thesis). Maltepe University, Institute of Social Sciences.

Shi, R., Zhang, S., Zhang, Q., Fu, S., & Wang, Z. (2016). Experiential avoidance mediates the association between emotion regulation abilities and loneliness. *PloS one*, *11*(12), 1-11. doi:10.1371/journal.pone.0168536

Southward, M. W., Christensen, K. A., Fettich, K. C., Weissman, J., Berona, J., & Chen, E. Y. (2014). Loneliness mediates the relationship between emotion dysregulation and bulimia nervosa/binge eating disorder psychopathology in a clinical sample. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, *19*(4), 509-513. doi:10.1007/s40519-013-0083-2

Süsen, Y. (2017). *The role of affect-related smoking outcome expectancies in relations between emotion dysregulation/negative urgency and smoking dependence* (Unpublished master thesis). Yıldırım Beyazıt University, Department of Social Sciences.

Şahin, M. A. (2019). *The effect of perceived social support on loneliness and hopelessness in the elderly* (Unpublished master thesis), Erzincan Binali Yıldırım University.

Şaşmaz, İ. B. (2014). Early maladaptive schemas and difficulties in emotion regulation as the predictors of borderline personality disorder and bipolar disorder (Unpublished master thesis). Okan University, Institute of Social Sciences.

Şeremet, A. (2019). *The role of emotion regulation in the relationship between insecure attachment and loneliness* (Unpublished master thesis). Anadolu University, Institute of Education Sciences.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. (Vol. 6). Pearson Education, Boston.

Tatsi, E., Kamal, A., Turvill, A., & Holler, R. (2019). Emotion dysregulation and loneliness as predictors of food addiction. *Journal of Health and Social Sciences, 4*(1), 43-58.

Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development, 59*(2-3), 25- 52. doi:10.1111/j.1540-5834.1994.tb01276.x

Werner, K., & Gross, J. J. (2010). Emotion regulation and psychopathology: A conceptual framework. In A. M. Kring & D. M. Sloan (Eds.), *Emotion regulation and psychopathology: A transdiagnostic approach to etiology and treatment* (pp. 13-37). New York, NY, US: Guilford Press.

Yıldız, M. A. (2016). Multiple Mediation of Emotion Regulation Strategies in the relationship between loneliness and positivity in adolescents. *Education and Science, 41*(186), 217-231. doi:10.15390/EB.2016.6193

Young, J. E., Klosko, J. S., & Weishaar, M. E. (2009). *Şema terapi* [Schema Therapy]. İstanbul, Litera Yayıncılık.

RESEARCH ON EDUCATION AND PSYCHOLOGY (REP)

Received: June 15, 2021
Accepted: June 25, 2021
http:// dergipark.org.tr/rep

e-ISSN: 2602-3733

June 2021 ◆ 5(1) ◆ 118-131

Research Article

Published: 06.30.2021

Examination of Teachers' Burnout Levels in Terms of Various Variables

Fatma Sıhhat Aydemir[1]
Minisitry of Education

Hakan Akçay[2]
Yıldız Technical University

Abstract

In this study, it was aimed to examine the burnout levels of teachers working in schools affiliated to the Ministry of National Education. Correlational survey model was used in the study. The sample of the research consists of 421 teachers working in primary, secondary, high school and science and art center (SAC). Maslach's (1981) Burnout Scale was used as the data collection tool. For the analysis, one way analysis of variance and independent samples t-tests were used. The result indicated that there was a significant difference between female and male teachers in the subdimension of depersonalization, which illustrates that male teachers' burnout level in the subdimension of depersonalization is higher than female teachers. It was also indicated that single teachers' burnout level was higher than married teachers except for the personal accomplishment subdimension. Additionally, there was a statistically meaningful difference in the subdimensions of emotional burnout and depersonalization depending on the age variable, according to which teachers who are between the ages of 51 and 60 perceive a higher level of burnout than other age groups.

Key Words

Burnout • Science and Art Center (SAC) • Teachers

[1] **Correspondance to:** Ministry of Education, E-mail: sfatmaaydemir@gmail.com **ORCID:** 0000-0002-9616-7862
[2] Yıldız Technical University, İstanbul, Turkey. E-mail: hakcay@yildiz.edu.tr **ORCID:** 0000-0003-0307-661X
Citation: Aydemir, F. S., & Akçay, H. (2021). Examination of teachers' burnout levels in terms of various variables. *Research on Education and Psychology (REP), 5*(1), 118-131.

The school is considered to be the most important institution that shapes the society we live in by transferring the value judgments of the society to the next generations in a healthy environment (Dewey, 1903). The effectiveness and efficiency of schools is undoubtedly related to the fact that the educational leaders and teachers working in these schools have positive perceptions and attitudes towards the school and are happy with the environment they are in. The most effective perception for teachers to do their job with pleasure is in the thought of how they are managed. The management activity, which is at the stage of organizing, coordinating, and putting people together to realize the determined goals of the organization, is a scientific and universal phenomenon (Basaran, 2008). The manager who successfully performs the management activity brings the employees together in a harmonious way within the framework of a certain school culture.

Employees are expected to develop positive attitudes and perceptions in the workplaces they like, and negative attitudes and perceptions in the situations they do not like. One of the negative perceptions developed in the workplace is burnout syndrome. The concept of burnout, which is accepted as an important phenomenon in our age, has been used in the United States since the 1970s to describe the difficulties faced by a working individual in his relationship with his profession. The emergence of the burnout syndrome is associated with Green's novel "A Case of Burnout" in 1961, which tells of an architect who experienced spiritual disappointments leaving his job and going to the forests (Göktepe, 2016). The concept of burnout means that employees' desire to do business decreases due to the problems they encounter in their business and private lives. This concept is important for both individual and social structures.

The concept of burnout has been defined by Freudenberger (1973, as sited in Göktepe, 2016). as the exhaustion of the individual's internal resources, depending on the burden caused by the weariness, failure, decrease in energy and desire, and unfulfilled demands during the working life Maslach and Jackson (1981, as cited in Göktepe, 2016) express the concept of burnout as the negativity that arises as a result of the problems encountered in business life. Burnout syndrome is a type of stress characterized by emotional exhaustion, depersonalization and feelings of failure. In other words, it is insufficient to cope with the stress encountered in business and private life. Each individual who encounters burnout defines it differently. However, the basic themes encountered regarding this concept are similar to each other. Burnout is the erosion of the work-related contract. After the burnout syndrome appears, the things that are seen as important, meaningful and impressive about the work begin to become unpleasant, boring, unsatisfied and meaningless. Burnout is the erosion of emotions. As burnout begins, emotions such as enthusiasm, dedication, security, and pleasure gradually fade, replacing them with anger, anxiety, and depression. Burnout is a problem between the individual and the job. Individuals perceive burnout as a personal crisis, but this actually means that they are in trouble with the workplace (Maslach & Leither, 1997). Burnout refers to the emotional erosion that an individual has experienced in relation to working at the workplace.

In terms of burnout, the factor of fatigue is more decisive than other factors as a stress-related health problem. These physiological correlates reflect other long-term indicators of stress. Parallel findings were found between burnout and substance addiction (Lheureux et al., 2016). The link between mental health and burnout is more complex. Burnout has been linked to the personality dimension of neuroticism and work-related psychiatric nerve weakness. Such data support the view that burnout is a type of mental illness (Maslach et al, 2001). The fact that the concept has been the focus of psychologists since the first examination of the concept is an important factor in regarding this syndrome as a psychological disorder.

The experiences in the spiritual worlds of teachers affecting their burnout levels differ according to school administrators' cooperative and authoritarian management styles, teachers' belief in justice and their level of contribution to the decision-making process. The decision-making action is considered by the teachers as the heart of the management process (Bursalıoğlu, 2012: 80). It is expected that teachers who participate in the decision-making process and expressing their own opinions on matters that concern them is highly committed to the job, whereas teachers who cannot participate in the decision-making process have higher burnout perception levels.

The aim of this research is to examine the burnout levels of teachers and administrators working in different institutions. In the light of the concrete data reached, it was revealed that the burnout levels of the teachers working in various institutions were different, and the necessity of making detailed studies in the field was revealed (Cemaloğlu & Şahin, 2007). The conclusion that the educators making positive developments at institutional level interact with the type of institution in addition to their demographic characteristics is a road map for possible improvements for the education staff. It is thought that studies on related variables and field surveys will contribute to the education system, as it provides concrete data about the level of burnout status of administrators and teachers, and in the formation of the philosophy of the education system in Turkey to determine the effect on teachers' burnout perceptions.

Method

Research Model

Survey model, one of the quantitative research methods, was used in the study. General survey models aim to make predictions and generalizations about the universe through sampling. These models are especially useful in determining the trends in the universe, and data is collected from as large a sample as possible (Şimşek, 2018).

Study Group

The sample of the study consists of 421 teachers, 84 of whom are in primary school, 113 in secondary school, 83 in high school and 141 in SAC. In Table 1, the demographic distribution of the teachers participating in the research is given.

Table 1

Demographic Distribution of Teachers

Variables	Groups	f	%
Gender	Male	202	48
	Female	219	52
	Single	130	31
Marital Status	Married	291	69
Age	20-30	71	17
	31-40	206	49
	41-50	116	27
	51+	28	7
Institution Type	Primary School	84	20
	Secondary School	113	27
	High School	83	20
	Science and Art Center (SAC)	141	33

Measurement Tools

Maslach's (1981) "Burnout Scale (Appendix-2)" was used to measure the burnout levels of teachers in the study. The scale consists of 22 items and is a five-point Likert type (1 = strongly disagree; 5 = completely agree). The sub-dimensions of the scale are divided into three as emotional exhaustion, depersonalization, and personal achievement. The validity and reliability study of the scale, which was developed by Maslach and Jackson in 1981 and translated into Turkish by Ergin, was conducted by Çapri in Turkey, and the Cronbach alpha internal consistency coefficient calculated to determine the reliability of the scale was found to be α=0.93 (Çapri, 2006).

Findings

Table 2 shows the mean and standard deviation values of the responses about the burnout status of teachers participating in the research towards their jobs. In addition, the mean and standard deviation values of the three sub-dimensions of the burnout scale are also included. It is seen that the average value of the answers to the burnout scale is 2.74. From this point of view, it is not possible to talk about the burnout of teachers towards their profession. When the sub-dimensions such as emotional exhaustion, depersonalization and personal achievement are examined, it is understood that there are some differences. The mean value of the responses in the emotional exhaustion sub-dimension is 2.52. The mean value of the depersonalization sub-dimension was found to be 1.83. When depersonalization is compared with emotional exhaustion, it is understood that participants are slightly more burnt-out in depersonalization than in emotional exhaustion.

Table 2

Burnout Status of Teachers

Burnout and Sub-dimensions	f	$\bar{x}$	Sd.
Emotional Exhaustion	421	2.52	0.83
Depersonalization		1.83	0.07
Personal Accomplishment		3.88	0.58
Burnout Scale General		2.74	0.42

The third sub-dimension, personal achievement, is the dimension that the participants perveice the most positively. It is understood that the participants generally think that they produce solutions to the problems of their students in their profession, and that they have a significant share in the success of their students in the work done.

Table 3

Evaluation of Teachers' Burnout Scores in terms of Gender

Scale	Gender	f	x̄	Sd.	t	df	p
Emotional Exhaustion	Female	219	2.56	0.85	-1.00	419	0.32
	Male	202	2.48	0.81			
Depersonalization	Female	219	1.72	0.67	3.58	419	0.00*
	Male	202	1.96	0.72			
Personal Accomplishment	Female	219	3.86	0.61	-0.39	419	0.69
	Male	202	3.83	0.57			
Burnout Scale General	Female	219	2.73	0.42	0.41	419	0.68
	Male	202	2.75	0.43			

As shown in Table 3, According to the results of the general burnout scale, it was concluded that female teachers were less burnt-out in their profession with a minimal difference compared to male teachers. An independent sample t-test was performed to see if the difference was significant. As a result of the test, the differences were only significant differences between male and female teachers for the depersonalization sub-dimension ($p<0.05$) regards to the general burnout of levels among the others. Therefore, it is possible to state that depersonalization burn-out levels of male teachers are higher than female teachers.

Table 4

Evaluation of Teachers' Burnout Scores in terms of Marital Status

Scale	Marital Status	f	x̄	Sd	t	df	p
Emotional Exhaustion	Single	130	2.71	0.82	3.17	419	0.00*
	Married	291	2.44	0.82			
Depersonalization	Single	130	1.94	0.73	2.14	419	0.03*
	Married	291	1.79	0.68			
Personal Accomplishment	Single	130	3.76	0.60	-1.89	419	0.06
	Married	291	3.88	0.58			
Burnout Scale General	Single	130	2.83	0.43	-2.06	419	0.03*
	Married	291	2.70	0.42			

According to the results of the burnout scale shown in Table 4, it was observed that single teachers showed more emotional burnout and insensitivity than married teachers. However, in the case of personal accomplishment, it has been determined that married teachers consider themselves more successful. According to the results of the burnout scale, it was concluded that single teachers were more burnt out in their professions, albeit with a small difference, compared to married teachers. Table 4 indicated that thare is a significant difference between the scores of single and married teachers for the emotional exhaustion and depersonalization sub-dimensions.

Table 5

Evaluation of Teachers' Burnout Scores in terms of Age

Scale	Groups	*N*	$\overline{x}$	sd	Source of Var.	Sum sq	Df	Mean Sq	*F*	*p*
Emotional Exhaustion	20-30	71	2.69	0.96	**Btw Gr.**	7.201	4	1.800	2.65	0.03*
	31-40	206	2.56	0.83	**Within Gr.**	283.078	416	0.680		
	41-50	116	2.36	0.74	**Total**	290.279				
	51+	28	2.58	0.75						
Depersonalization	20-30	71	1.94	0.85	**Btw Gr.**	2.999	4	0.750	1.53	0.19
	31-40	206	1.83	0.69	**Within Gr.**	203.629	416	0.489		
	41-50	116	1.74	0.61	**Total**	206.627				
	51+	28	2.02	0.73						
Personal Accomplishment	20-30	71	3.77	0.58	**Btw Gr.**	3.722	4	0.930	2.73	0.03*
	31-40	206	3.82	0.58	**Within Gr.**	141.751	416	0.341		
	41-50	116	3.97	0.53	**Total**	145.472				
	51+	28	3.63	0.79						
Burnout Scale General	20-30	71	2.82	0.48	**Btw Gr.**	1.190	4	0.298	1.63	0.17
	31-40	206	2.75	0.42	**Within Gr.**	76.012	416	0.183		
	41-50	116	2.68	0.39	**Total**	77.202				
	51+	28	2.75	0.41						

According to the results of the one way analysis of variance (ANOVA) test of burnout scale shown in Table 5, teachers between the ages of 20-30 are more emotionally exhausted than teachers in other age groups; teachers over the age of 51 are more insensitive than teachers in other age groups; teachers between the ages of 41-50 are more likely to find themselves more successful in other age groups. According to the results of Table 5 of the general burnout scale, it was seen that teachers between the ages of 20-30 were the most burnout group towards their profession compared to other age groups. The least burnout group towards their professions are teachers between the ages of 41-50. One-way analysis of variance (ANOVA) was performed to understand whether the difference between age groups was statistically significant. As a result, it was seen that the differences were significant for the emotional exhaustion sub-dimension, insignificant for the depersonalization sub-dimension, significant for the personal achievement sub-dimension, and insignificant for the general burnout scores. Post Hoc test was applied to comprehend which age groups' emotional exhaustion and personal achievement sub-dimension scores differ (see Table 5).

Table 6

Comparison of Burnout Scores of Teachers in terms of Age Groups

Scale	Age (i)	Age (j)	Mean Difference	Sh	p
Emotional Exhaustion	20-30	31-40	.13	.11	.25
		41-50	.32*	.12	.01*
		51 +	.11	.19	.56
	31-40	20-30	-.13	.11	.25
		41-50	.19*	.10	.04*
		51 +	-.02	.17	.91
	41-50	20-30	-.32*	.12	.01
		31-40	-.19*	.10	.04
		51 +	-.22	.18	.22
	51 +	20-30	-.11	.19	.56
		31-40	.02	.17	.91
		41-50	.22	.18	.22
Personal Accomplishment	20-30	31-40	-.05	.08	.53
		41-50	-.19*	.09	.03
		51 +	.14	.13	.30
	31-40	20-30	.05	.08	.53
		41-50	-.14*	.07	.03*
		51 +	.19	.12	.12
	41-50	20-30	.19*	.09	.03*
		31-40	.14*	.07	.03*
		51 +	.33*	.13	.01*
	51 +	20-30	-.14	.13	.30
		31-40	-.19	.12	.12

As a result of the Post Hoc multiple comparison test, it was determined that the average scores of the teachers in the 20-30 age range in the emotional exhaustion sub-dimension were statistically higher and significant than those in the 41-50 age range, and those in the 31-40 age range compared to the 41-50 age range. When the scores in the personal achievement sub-dimension were examined, it was seen that the 41-50 age group was statistically higher and more significant than the 20-30 and 31-40 age groups (see Table 6).

Table 7

Evaluation of Teachers' Burnout Scores in terms of Institution Type

	Groups	f	$\bar{x}$	Sd	F	p
Emotional Exhaustion	Primary	84	2.63	0.85	10.37	0.00*
	Secondary	113	2.76	0.82		
	High School	83	2.59	0.78		
	SAC	141	2.22	0.78		
Depersonalization	Primary	84	1.72	0.68	7.05	0.00*
	Secondary	113	2.02	0.68		
	High School	83	1.96	0.78		
	SAC	141	1.68	0.64		
Personal Accomplishment	Primary	84	3.91	0.59	9.53	0.00*
	Secondary	113	3.66	0.52		
	High School	83	3.74	0.62		
	SAC	141	4.01	0.57		
Burnout Scale General	Primary	84	2.78	0.43	6.37	0.00*
	Secondary	113	2.84	0.41		
	High School	83	2.77	0.42		
	SAC	141	2.62	0.41		

According to the results of the burnout scale shown in Table 7, it is observed that teachers working in secondary schools are more emotionally exhausted than teachers working in other institutions, teachers working in secondary schools are more insensitive than teachers working in other institutions, teachers working in SACs see themselves as more successful than teachers working in other institutions. According to the results of the burnout scale shown in Table 7, it has been revealed that the teachers who are least burnout in their profession are those working in SACs, and those who are most burnout are those working in secondary schools. One-way analysis of variance (ANOVA) was applied to understand whether the general burnout scores and sub-dimensions of the teachers participating in the study were statistically significant according to the institution they worked for. As a result, it was seen that the differences were significant for both general burnout and burnout sub-dimensions.

Table 8

Comparison of Burnout Scores of Teachers in terms of Working Institution

Scale	Institution	Institution (j)	Mean Difference	Sh	p
Emotional Exhaustion	Primary School	Secondary School	-.13	.11	.67
		High School	.03	.12	.99
		SAC	.40*	.11	.00*
	Secondary School	Primary School	.13	.11	.67
		High School	.16	.11	.46
		SAC	.53*	.10	.00*
	High School	Primary School	-.03	.12	.99
		Secondary School	-.16	.11	.46
		SAC	.36*	.11	.00*
	SAC	Primary School	-.40*	.11	.00
		Secondary School	-.53*	.10	.00
		High School	-.36*	.11	.00
Depersonalization	Primary School	Secondary School	-.30*	.09	.01
		High School	-.24	.10	.09
		SAC	.03	.09	.97
	Secondary School	Primary School	.30*	.09	.01*
		High School	.06	.09	.92
		SAC	.34*	.08	.00*
	High School	Primary School	.24	.10	.09
		Secondary School	-.06	.09	.92
		SAC	.28*	.09	.01*
	SAC	Primary School	-.038	.09	.97
		Secondary School	-.34*	.08	.00
		High School	-.28*	.09	.01
Personal Accomplishment	Primary School	Secondary School	.25*	.08	.01*
		High School	.17	.08	.21
		SAC	-.09	.07	.58
	Secondary School	Primary School	-.25*	.08	.01
		High School	-.08	.08	.72
		SAC	-.35*	.07	.00
	High School	Primary School	-.17	.08	.21
		Secondary School	.08	.08	.72
		SAC	-.27*	.07	.00
	SAC	Pirmary School	.09	.07	.58
		Secondary School	.35*	.07	.00*
		High School	.27*	.07	.00*
Burnout Scale General	Primary School	Secondary School	-.05	.06	.77
		High School	.00	.06	.99
		SAC	.16*	.05	.02*
	Secondary School	Primary School	.05	.06	.77
		High School	.06	.06	.70
		SAC	.21*	.05	.00*
	High School	Primary School	-.00	.06	.99
		Secondary School	-.06	.06	.70
		SAC	.15*	.05	.04*
	SAC	Primary School	-.16*	.05	.02
		Secondary School	-.21*	.05	.00
		High School	-.15*	.05	.04

Considering the average scores in the emotional exhaustion sub-dimension according to the Post Hoc multiple comparison test results in Table 8, it was determined that the primary school, secondary school, and high school groups were statistically higher and more significant than the SAC group. When the groups in the depersonalization sub-dimension were examined, it was seen that the scores of secondary schools were higher than primary schools and SACs, and the scores of high schools were statistically higher and more significant than SACs. In personal achievement, which is another sub-dimension, the score of the primary school group is higher than secondary school and SAC is higher than secondary and high school. When the total scores of the burnout scale were examined, it was seen that the scores of the primary, secondary and high school groups were statistically higher and significant than the SAC group.

Discussion

In the study, it was aimed to examine the burnout levels of teachers.

As a result of the research results, there are three sub-dimensions in the burnout scale. When the sub-dimensions of burnout were evaluated in our study, it was seen that the emotional exhaustion score was higher than the depersonalization score. It was concluded that teachers' personal achievement score, which is one of the sub-dimensions of burnout, is quite high.

While there is no statistically significant difference between male and female teachers in the total burnout score, emotional exhaustion sub-dimension, and personal achievement sub-dimensions, there is a significant difference in the personal achievement sub-dimension. Looking at the literature, a significant difference was found between the level of burnout and the gender variable, and females were found to be more exhausted than males (Ersoy Yılmaz et al. 2014). Likewise, studies revealing females are more consumed have been conducted (Babaoglan, 2006; Babaoğlan 2007; Girgin, 2011). In different studies, it was concluded that the gender variable did not affect the burnout status (Akçamete et al. 2001; Avşaroğlu, Deniz, & Kahraman, 2005; Çelikkaleli, 2011; Dolunay, 2002; Sarpkaya, 2011).

According to the results of the burnout scale, it was concluded that single teachers were more burnt out in their professions, albeit with a small difference, compared to married teachers. As a result of the research, it was understood that the difference between the scores of single and married teachers for the emotional exhaustion sub-dimension and depersonalization subdimension were significant, insignificant for the personal achievement sub-dimension, and statistically significant for general burnout. In another study conducted on teachers, it was found that marital status did not affect burnout, but being divorced increased emotional exhaustion (Cemaloğlu and Şahin, 2007). It was stated that marital status, one of the demographic characteristics, did not affect the sub-dimensions of burnout (Gurbuz, 2008). It was determined that marital status did not affect burnout in general, but unmarried teachers were more burnt out in terms of personal success, which is one of its sub-dimensions (Kırılmaz et al., 2003). Various studies have shown that marital status does not affect burnout (Arslan, 2007; Çavuşoğlu, 2005; Dolunay, 2002; Gündüz, 2006). When the burnout status of the teachers was examined by age groups, it was determined that the average scores of the teachers in the 20-30 age range in the emotional exhaustion sub-dimension were statistically higher and significant than those in the 41-50 age range, and those in the 31-40 age range compared to the 41-50 age range. When the scores in the personal achievement sub-dimension were examined, it was seen that the 41-50 age group was statistically higher and more significant than the 20-30 and 31-40 age groups. In a study conducted with teachers, it was found that there is a negative correlation between age and burnout levels (Dolunay, 2002). According to Dolunay, as age increases, emotional exhaustion and depersonalization, which are the sub-dimensions of exhaustion, decrease. Similarly, in different studies, the burnout levels of young teachers were found to be higher than those of more experienced teachers.

Young teachers' inexperience in coping with the stress they experience is one of the factors that increase burnout (Babaoğlan, 2007; Dolunay and Piyal, 2003; Otacıoğlu, 2008; Özben and Argun, 2003). In different studies conducted with research assistants, it was found that emotional exhaustion increases with age (Agaoglu et al., 2004).

When the differences in burnout and its sub-dimensions are examined according to the institutions where the teachers are currently working, it has been concluded that the burnout levels of the teachers working in SACs are at the lowest level compared to the employees of other institutions. The burnout level of SAC teachers is at the lowest level compared to other school types. In the total scores of the burnout scale, primary school, secondary school and high school group scores were found to be statistically higher and significant than the SAC teachers. Students receiving education in SACs are recognized as gifted students as a result of various assessments and intelligence tests. In SACs, teachers only work with gifted students. The most distinctive feature of these institutions, which distinguishes them from other schools, is that students are selected and accepted according to certain criteria. In different studies, it has been seen that the developmental characteristics of primary school students, their young age, and the fact that they have a course load of up to 30 hours are the reasons why teachers working in primary schools are more depersonalized than teachers working in secondary schools (Cemaloğlu and Şahin 2007). In a different study, it was concluded that school type did not affect burnout in the dimension of emotional exhaustion (Izgar, 2001).

As a result, it was concluded that the burnout levels of the teachers aged 41-59 were the lowest among the teachers participating in the study, while the burnout levels of the teachers aged between 20-30 were the highest. When examined in terms of the school type variable, it was concluded that the burnout levels of SAC teachers were the lowest and the burnout levels of the secondary school teachers were the highest. According to the marital status variable, it was concluded that the burnout levels of single teachers were higher than married teachers. There was no significant difference in terms of gender variable in the burnout levels of the teachers participating in the research.

References

Ağaoğlu, E., Ceylan, M., Kasım, E., & Madden, T. (2004). *Araştirma görevlilerinin kendi tükenmişlik düzeylerine ilişkin görüşleri* [Opinions of research assistants about their own burnout levels]. Malatya: XIII. Ulusal Eğitim Bilimleri Kurultayı.

Akçamete, G., Kaner, S., & Sucuoğlu, B. (2001). *Öğretmenlerde tükenmişlik iş doyumu ve kişilik* [Burnout, job satisfaction and personality in teachers]. Nobel Yayınları.

Arslan, Ö. G. (2007). *Okul Müdürlerinin Öğretimsel Liderlik Anlayışı ile Öğretmenlerin Mesleki Tükenmişliğinin Karşılaştırılması: Çaycuma Alan Araştırması Örneği* [Comparison of School Principals' Understanding of Instructional Leadership and Teachers' Professional Burnout: The Case of Çaycuma Field Study]. Master's Thesis, Zonguldak Karaelmas Üniversitesi.

Avşaroğlu, S., Deniz, M. D., & Kahraman, A. (2005). Teknik öğretmenlerde yaşam doyumu iş doyumu ve mesleki tükenmişlik düzeylerinin incelenmesi [Investigation of life satisfaction, job satisfaction and professional burnout levels of technical teachers]. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi. 14*, 115-129.

Babaoğlan, E. (2006). *İlköğretim Müdürlerinde Tükenmişlik* [Burnout in Primary Education Principals]. Doctoral Dissertation, Abant İzzet Baysal Üniversitesi, Bolu.

Babaoğlan, E. (2007). İlköğretim okulu yöneticilerinde tükenmişliğin bazı değişkenlere göre araştırılması [Investigation of burnout in primary school administrators according to some variables]. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 14*, 55–67.

Başaran, İ. (2008). *Örgütsel davranış insanin üretim gücü* [Organizational behavior, human productive power]. Ekinoks Eğitim Danışmanlık.

Bursalıoğlu, Z. (2012). Okul Yönetiminde Yeni Yapı ve Davranış [New Structure and Behavior in School Management]. Ankara: Pegem Akademi.

Cemaloğlu, N., & Şahin, D. (2007). Öğretmenlerin mesleki tükenmişlik düzeylerinin farklı değişkenlere göre incelenmesi [Examination of teachers' professional burnout levels according to different variables]. *Kastamonu Eğitim Dergisi, 15*(2), 465-484.

Çapri, B. (2006). Tükenmişlik ölçeğinin Türkçe uyarlaması, geçerlik ve güvenirlik çalışması [Turkish adaptation, validity and reliability study of the burnout scale]. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, *2*(1), 62-77.

Çavuşoğlu, İ. (2005). *Endüstri meslek liselerinde çalışan öğretmenlerin tükenmişlik düzeyleri ile bazı kişisel değişkenler arasındaki ilişki Bolu İli örneği* [Industry professional relationships between some personal variables with burnout of teachers working in schools Bolu example]. Master's Thesis, Abant İzzet Baysal Üniversitesi, Bolu.

Çelikkaleli, Ö. (2011). Yetişkin eğitimcisi öğretmenlerin tükenmişlik ve mesleki yetkinliklerinin incelenmesi [Examination of burnout and professional competencies of adult educator teachers]. *Mehmet Akif Ersoy Üniversitesi SBE Dergisi*, *4,* 13-26.

Dewey, J. (1903). Democracy in education. *The Elementary School Teacher*, *4*(4), 193-204.

Dolunay, A. B. (2002). *Genel liseler ve teknik-ticaret-meslek liselerinde görevli öğretmenlerde tükenmişlik durum araştırması, Keçiören İlçesi* [Burnout status research among teachers working in general high schools and technical-trade-vocational high schools, Keçiören Distric]. Master's Thesis, Ankara Üniversitesi, Ankara.

Dolunay, B. A. ve Piyal, B. (2003). Öğretmenlerde bazı mesleki özellikler ve tükenmişlik [Some professional characteristics and burnout in teachers]. *Kriz Dergisi*, *1*, 35-48.

Ersoy Yılmaz, S., Yazıcı, N., & Yazıcı, H. (2014). Öğretmen ve yönetici öğretmenlerin tükenmişlik düzeylerinin incelenmesi [Examination of burnout levels of teachers and administrators]. *Yönetim ve Ekonomi Araştırmaları Dergisi. 24.* http://dx.doi.org/10.11611/JMER357

Girgin, G. (2011). Bir grup ilköğretim öğretmeninde tükenmişlik sendromu [Burnout syndrome in a group of primary school teachers]. *Türkiye Klinikleri Tıp Bilimleri Dergisi*, 31, 602- 608. doi: 10.5336/medsci.2009-16135

Göktepe, A. K. (2016). *Tükenmişlik sendromu* [Burnout syndrome]. Metis.

Gürbüz, Z. (2008). *Kars ilinde görevli okul öncesi öğretmenlerinin iş tatmin düzeyleri ve mesleki tükenmişlik düzeylerinin incelenmesi* [Investigation of job satisfaction levels and professional burnout levels of pre-school teachers working in Kars]. Master's Thesis, Marmara Üniversitesi, İstanbul.

Izgar, H. (2001). Okul yöneticilerinin tükenmişlik düzeyleri [Burnout levels of school administrators]. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi,* 27, 335-340.

Kırılmaz, A. Y., Çelen, Ü., & Sarp, N. (2003). İlköğretim'de çalışan bir öğretmen grubunda tükenmişlik durumu araştırması [A study of burnout in a group of teachers working in primary education]. *İlköğretim-Online, 2* (1), 2-9.

Lheureux, F., Truchot, D., & Borteyrou, X. (2016). Suicidal tendency, physical health problems and addictive behaviours among general practitioners: their relationship with burnout. *Work & Stress*, *30*(2), 173-192. https://doi.org/10.1080/02678373.2016.1171806

Maslach, C. & Jackson, S. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, Willey, 99-133.

Maslach, C. Schaufeli W., & Leither, M. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422. https://doi.org/10.1146/annurev.psych.52.1.397

Maslach, C., Leither, P. (1997). *The truth about burnout*. Jossey-Bass A Willey Company.

Otacıoğlu, S. G. (2008) Müzik öğretmenlerinde tükenmişlik sendromu ve etkileyen faktörler [Burnout syndrome in music teachers and affecting factors]. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, *15*,103–116.

Özben, Ş., & Argun, Y. (2003) İlköğretim öğretmenlerinin umutsuzluk ve tükenmişlik düzeyleri üzerine bir araştırma [A research on the hopelessness and burnout levels of primary school teachers]. *Ege Eğitim Dergisi, 1*, 36-48.

Sarpkaya, R. (2011). *Öğretim elemanlarının iş doyumu ve tükenmişlik düzeyleri ADÜ örneği* [An example of academic staff's job satisfaction and burnout levels].; Adnan Menderes Üniversitesi, Aydın.

Şimşek, A. (2018). Araştırma Modelleri [Research Models]. A. Şimşek in *Sosyal Bilimlerde Araştırma Yöntemleri* (pp. 80-107). Eskişehir: Anadolu Üniversitesi Açıköğretim Fakültesi Yayını No: 1619.

Tabachnick, B.G., & Fidell, L.S. (2013) *Fidell Using Multivariate Statistics* (sixth ed.) Pearson.