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Psychological resilience and health perception among adolescents and related factors

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Abstract

This study aims to analyze the psychological resilience and health perception among adolescents together with the affecting factors. The sample of this cross-sectional study includes 561 adolescents who are 7th and 8th grade students attending secondary schools in Giresun province of Turkey, during 25 May - 5 June in 2015. During data collection, a questionnaire form comprising questions on socio-demographic characteristics and health perception is used in addition to the Adolescent Psychological Resilience Scale (APRS). During the analysis of the data; frequency, percentage, independent samples t test, and Mann-Whitney U test have been utilized. The APRS score of the participating students is found as 97.4±11.0. The psychological resilience score of the students who perceive their health as moderate is significantly lower than that of the students who perceive their health as good ($p<0.001$). For the students who perceive their health as moderate; the family support ($p<0.001$), school support ($p<0.001$), peer support ($p<0.001$), adaptation ($p<0.001$), determination to struggle ($p<0.001$) and empathy ($p<0.001$) scores, which are the subscales of APRS, are also found to be significantly lower. Carrying out studies with the purpose of increasing the psychological resilience of the adolescents will help adolescents in being affected less from the negative circumstances and in the protection of their health.

Keywords: Psychological resilience, adolescent, health perception, family

Introduction

The period of adolescence is one of the life periods during which rapid physiological and psychological growth and development take place and adolescents can encounter age-specific potential risks. Vulnerability, exclusion from society, stress, being neglected, abuse, harmful habits, and deprivation of family support are among the risks that adolescents may encounter [1].

The abilities of the adolescents to struggle with and handle these risks varies with their levels of psychological resilience. Benard defines psychological resilience as protective mechanisms that enable healthy adaptation to developmental process despite the presence of high risk factors within this process [2]. According to Bonanno, psychological resilience is "a dynamical process that enables getting out of this situation stronger when life difficulties are experienced, and making progress and being strong when a problem is encountered" [3].

The risks that the adolescents face can be related to the personal characteristics, and familial and social factors. Anxious temperament, low self-confidence, low intelligence level, health problems and lack of attention can be given as examples of personal characteristics. The health status of the parents, family conflicts, death of one of the parents, their divorce, and conflicts among siblings are associated with the familial adolescence period risks. Economical disadvantages, poverty, the quality of the schools, and the lack of social role models are among the social risks factors that the adolescents can experience [1]. The adolescence period provides a basis for the adulthood period. It is known that the adolescents who can handle these problems healthily during this period become healthy during their adulthood, and those adolescents who cannot handle them have more problems during their adulthood period. In the study of Poole et al. (2017); it is determined that among the children who had adverse childhood experience like abuse, being neglected, and functional disorders in the family, the ones who have low psychological resilience suffer from depression more in adulthood when compared with those who have high psychological resilience [4].

The study of Ye et al. (2016) examines peer victimization and protective effect of psychological resilience among children immigrated from rural to urban areas in China, and it is stated that the children who have high psychological resilience and social support have low depression risk [5].

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It is found that individuals having high psychological resilience can control the situation better and stay away from these circumstances when they face stress and unfavorable circumstances compared to those have low psychological resilience. These unfavorable circumstances that the adolescents may come across include risks like drug addiction, failure in school, mental problems, and not obeying rules [6]. It is found that; protection of mental health for those children who have parents with mental health problems, recovery of the children after the loss of a parent, the adaptation for those children who are adopted, and performing successfully at school for those children who experience poverty and adverse circumstances are all related to psychological resilience [7]. The protective features for increasing psychological resilience are personal, familial and environmental factors. Having high levels of intellectual skills and high self-confidence, having positive temperament, harmony in family, positive parent–adolescent communication, positive relations with the school, teachers as role models, and strong social connections increase the psychological resilience of the adolescents [8]. The more positive personal characteristics, and positive familial and environmental factors the adolescents have, the higher psychological resilience they will have and the less they will be affected by the risks. The adolescents' acquiring the necessary information and behaviors to improve and increase psychological resilience will enable them to in a healthy way during this period.

In this study, it is aimed to examine the psychological resilience levels, health perceptions and the factors affecting the psychological resilience of adolescents.

Materials and Methods

This descriptive and cross-sectional study is carried out in the secondary schools located at the city center of Giresun province of Turkey, during 25 May - 5 June in 2015. Necessary permissions have been taken from the Provincial Directorate of National Education. Three schools are chosen using set sampling method from fifteen secondary schools administered by the Provincial Directorate of National Education. There are 936 students in 7th and 8th grades at the chosen secondary schools. The minimum sample size for this study is calculated as 273 but sample selection is not performed in this study and the author has aimed to reach all of the 936 students in all three schools. A total of 561 students have been included in the study, who have agreed to participate in the study. After the communications with the managements of the schools, the application dates of the study are planned. The necessary permissions are obtained from the corresponding course teachers and the students are informed about the study. Our study conforms to the principles of Helsinki Declaration. The data is collected from the participating students by means of a questionnaire comprising questions about socio-demographic characteristics and health perception, and the Adolescent Psychological Resilience Scale (APRS). In order to assess the health perception of the students, the questionnaire includes a question asking how they perceive their health. The choices for this question include "Bad", "Moderate", "Good", and "Very good". The APRS scale is developed by Bulut et al. (2012) and can be applied on adolescents within the age interval of 14-18. The scale is developed as Likert-type (1: Not applicable for me - 4: Totally applicable for me). The scale consists of 6 sub-dimensions including family support, peer support, school support, adaptation, determination to struggle and empathy in addition to 29 items. The scores that can be obtained from the scale range from 29 to 116. A high score indicates that the adolescent has a high level of psychological resilience [9]. Frequency, percentage, independent samples t test, and Mann-Whitney U test are used during the evaluation of the data. The fitness of the data to normal distribution has been tested with Kolmogorov-Smirnov test. The statistical significance level is taken as 0.05.

Results

The socio-demographic characteristics of students participating in the study are provided in Table 1. 55.1% of the students are female students and 53.5% of the students are from the 8th grade. 67.8% of the mothers of the students and 52% of the fathers of the students have the education level of secondary school and under. It is found that 57.2% of the families include smoker members. It is determined that 16.2% of the students participating in the study have chronic diseases and 0.5% of them are smokers. 11.8% of the students perceive their health as moderate or bad while 49% perceive their health as very good.

It is determined that the APRS scores; family support, school support, and determination to struggle subscale scores of the students who state that they live together with smoking family members are significantly lower ($p<0.01$).

The comparison results of the APRS and subscale scores with respect to gender are given in Table 2. The psychological resilience scores of the female students are found to be significantly higher than that of the male students ($p<0.05$). With respect to gender, the means of the school support, determination to struggle, and empathy subscale scores of the APRS are significantly higher ($p<0.05$).

The psychological resilience scores with respect to health perception are provided in Table 3. It is found that APRS scores are significantly lower for those students who perceive their health as moderate ($p<0.001$). For these students perceiving their health as moderate, the family support, peer support, adaptation, determination to struggle, and empathy subscale scores are found to significantly lower compared to that of the students who perceive their health as good ($p<0.001$). The school support subscale scores of these students are also determined to be significantly lower compared to the students perceiving their health as good ($p<0.002$).

Table 1. The Socio-Demographic Characteristics of the Students

Characteristics	n	%
Gender		
Female	309	55.1
Male	252	44.9
Grade		
7th	237	42.2
8th	300	53.5
Education status of the mother		
Primary school	185	33.0
Secondary school	195	34.8
High school	120	21.4
University	61	10.4
Education status of the father		
Primary school	118	21.0
Secondary school	174	31.0
High school	170	30.3
University	95	16.9
Is there any smoker in the family?		
Yes	321	57.2
No	239	42.6
Are you a smoker?		
Yes	3	0.5
No	558	99.5
Is there any person with a chronic disease in the family?		
Yes		
No	137	24.4
	420	74.9
Do you have a chronic disease?		
Yes	91	16.2
No	469	83.6
Health perception		
Bad	6	1.1
Moderate	60	10.7
Good	218	38.9
Very good	275	49.0

[1] Since some of the students have not responded to some questions, the total counts may not be the same for all questions and may not include 100% of the students.

Table 2. Comparison of APRS and Subscale Scores with respect to Gender

Dimensions	Gender	n	X±SD	p
APRS total scale	Female	272	98.6±10.8	**0.010**
	Male	205	95.9±11.3	
Family support	Female	296	24.7±4.1	0.148
	Male	239	24.2±3.4	
Peer support	Female	303	18.0±2.8	0.397
	Male	238	17.8±2.4	
School support	Female	302	17.1±3.3	**0.001**
	Male	242	15.5±3.9	
Adaptation	Female	299	12.2±2.2	0.125
	Male	242	12.5±2.2	
Determination to struggle	Female	299	16.2±2.7	**0.003**
	Male	243	15.5±2.9	
Empathy	Female	306	10.0±1.4	**0.047**
	Male	248	9.7±1.7	

[1] Since some of the students have not responded to some questions, the total counts may not be the same for all questions and may not include 100% of the students.

Table 3. Comparison of APRS and Subscale Scores with respect to Health Perception

Dimensions	Health Perception	n	X±SD	p
APRS total scale	Moderate	54	88.4±12.3	**<0.001**
	Good	423	98.6±10.4	
Family support	Moderate	64	21.6±4.7	**<0.001**
	Good	472	24.8±3.5	
Peer support	Moderate	62	16,5±3,7	**<0.001**
	Good	479	18.0±2.5	
School support	Moderate	65	15.0±3.8	**<0.002**
	Good	480	16.6±3.6	
Adaptation	Moderate	63	11.2±2.5	**<0.001**
	Good	477	12.5±2.1	
Determination to struggle	Moderate	63	14.4±2.5	**<0.001**
	Good	479	16.1±2.8	
Empathy	Moderate	64	9.2±1.7	**<0.001**
	Good	490	10.0±1.5	

[1] Since some of the students have not responded to some questions, the total counts may not be the same for all questions and may not include 100% of the students.

Discussion

General health status, genetic factors, personality, and gender are the main biological factors affecting psychological resilience. The children having high psychological resilience are morehealthy, physically strong and have regular diet and sleep habits [10,11]. The APRS scores of the students participating in the study are generally high. It is founded that the education level of the mother affects the psychological resilience of the adolescents. Accordingly, the total psychological resilience score and the family support, school support, the determination to struggle determination subscale scores of the children with mothers who have high school or higher education levels are significantly higher. Similarly, total psychological resilience score and the peer support subscale scores of the children with fathers who have high school or higher education levels are significantly higher than those whose fathers have education levels of secondary school or lower. Education level of the parents is one of the most important environmental factors affecting the psychological resilience of children [10,11]. According to the study by Garmezy (1987), high intelligence level, high socio-economic level, the education levels of the parents, positive communication between children and parents, and a positive family environment are among the factors which increase the psychological resilience of individuals [12].

The psychological resilience scores of the female students are found to significantly higher compared to that of the male students. This result is in line with the related literature. In the study by Önder et al. (2008), the psychological resilience of the female students is found to significantly higher than the male students [13]. In the study by Güngörmüş et al. (2015) where the psychological resilience of the nursing students is examined, the psychological resilience of the female students is found to significantly higher than the male students [14]. This observation can be explained with the genetics factors in addition to the common practice in the Turkish culture that, beginning from their early childhood, the girls are given responsibility in housework and family care and hence they acquire adult behaviors earlier.

One of the most significant aspects of psychological resilience is to have a positive view of the world. The individuals who have a positive world view are capable of finding solutions to their problems and see the opportunities in harsh situations, when they are faced with stress or a disaster [15].

In several related studies; it is concluded that optimism and subjective well-being which includes positive emotions contribute to positive health perception and longer lifetimes. In addition to the health-protecting effects of subjective well-being, it has got positive effects on the control of the diseases and their treatment [16,17].

In our study; when the psychological resilience scores of the students who perceive their health as moderate or good are compared, the APRS scores of the students who perceive their health as good are found to be significantly higher. For those students who perceive their health as moderate; family support, peer support, school support, adaptation, determination to struggle, and empathy APRS

subscale scores are found to be significantly lower compared to the students perceiving their health as good. According to the results of the study, there is a relationship between psychological resilience and health perception. The students who are psychologically resilient have more positive relationships with their families, friends, and teachers and they have high level of determination to struggle. World Health Organization (WHO) defines "health" not just as not having diseases or disabilities but as a complete well-being physically, psychologically, and socially [18]. In this sense, one of the most useful interventions for young people are systematic and coordinated efforts to improve their health and socio-emotional competencies [19].

According to a related report prepared by UNICEF, the main components of subjective well-being include life satisfaction, proper communication of the parents and friends in addition to subjective education and health [20]. The protective factors to improve psychological resilience among the individuals include familial and social factors in addition to personal ones. Therefore, in addition to the genetic factors, intelligence level, and personality traits of the adolescents; positive family environment, socio-economic characteristics, school environment, the teachers' being role models, peer relationships and environment all affect the psychological resilience of the adolescents [8]. The high levels of psychological resilience in turn contributes to the positive health perception. In the study by Mak et al. (2011), it is stated that the individuals having high psychological resilience also have high self-respect and they have positive opinions regarding the future [21].

The period of adolescence includes risks for the adolescents but also opportunities as they are prepared for adulthood. A high level of psychological resilience helps protect the individual from damages that s/he may encounter and it also helps them recover when they experience risks and get hurt [1]. The protective factors that affect psychological resilience in adolescents include personal factors and social environment including the family, school, and peer environments. The awareness of the protection factors to increase psychological resilience and carrying out supportive studies for the adolescents will contribute to the improvement of the health perception and the increase of the well-being.

Conclusion

In our study, the female students have been found to have higher psychological resilience than the male students. At the same time, it is found that as the education levels of the mothers and fathers increase, the psychological resilience of the students also increase. The total psychological resilience score of the students is high. When we assess the psychological resilience with respect to the health perception, the scores of the students who perceive their health as good are higher than the scores of the students who perceive their health as moderate. During the adolescence period which has risks and opportunities for young individuals, the factors of psychological resilience should be known and studies should be carried out on this topic in order to protect the adolescents from the adverse circumstances and improve their health.

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