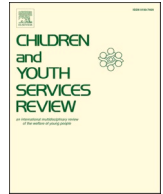




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Relationship between adolescents' perceptions of social support and their psychological well-being during COVID-19 Pandemic: A case study from Turkey

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ABSTRACT

The aim of this research was to establish the relationship between the perceptions of social support and the psychological well-being among adolescents during the coronavirus disease 2019 (COVID-19) pandemic. This research, which includes descriptive and relative features, was conducted from December 15, 2020 to January 31, 2021. There were 378 participants, all of whom were adolescents aged from 13 to 18 years who were living in Turkey. Either the adolescents themselves or their parents used social media tools or sites such as Facebook, Whatsapp, Instagram, etc., and they had all agreed to participate voluntarily. The adolescents had given their permission to the ethics committee through oral or written statements before the data were collected. The data collection process involved completing a questionnaire form, the Multidimensional Scale of Perceived Social Support (MSPSS) and the Psychological Well-being Scale for Adolescents (PVSA). The Analysis of the data included numbers, percentages, means, the independent samples *t* test, analysis of variance (ANOVA), the Kruskal-Wallis H test, multiple regression analysis and correlations between these. Of the 378 participants who were admitted to the study, the mean age was 14.66 ± 1.65 , and 52.1% were female. The total mean for the perceived social support among adolescents was established as being 54.39 ± 17.13 . The mean level for psychological well-being was determined as being 91.13 ± 12.34 . A significant difference was detected between gender and levels of social support and psychological well-being of adolescents ($p < 0.05$). As a result of multiple regression analysis, the overall score of gender and PVSA has been found to have a statistically meaningful effect on the MSPSS overall score ($p < 0.05$). However, the difference in relation to the classes, the parents' jobs, the income levels, the family types and the places of residence of the adolescents in terms of social support and psychological well-being was not statistically significant. There was a statistically positive and strong correlation between the scores for social support and psychological well-being. The present study, which occurred during the outbreak of COVID-19, found that the levels of social support perceived by the adolescents and their psychological well-being were decent. In addition, the study showed that as the levels of perceived social support among the adolescents rose, their psychological well-being also increased positively.

1. Introduction

A new type of coronavirus called severe acute respiratory syndrome coronavirus 2, which originated at Wuhan City in Hubei Province, in China, is an international health concern that has been present since February 2020 (Velavan & Meyer, 2020). According to the World Health Organization, there have been over 435 million cases worldwide of coronavirus disease 2019 (COVID-19), which is caused by this virus, and Turkey has over 14 million cases (Republic of Turkey Ministry of Health, 2022; World Health Organization, 2022). The COVID-19 pandemic has

affected many areas of life, such as health, economies, societies and psychology. Worldwide studies have shown that the pandemic triggered many psychological problems, including feelings associated with grief, loss, depression, anxiety and post-traumatic stress disorder (Grey et al., 2020; Liang et al., 2020; Qi et al., 2020; Zhai & Du, 2020). According to a systematic review of the COVID-19 epidemic, depression and anxiety disorder have been identified as varying ratios, low levels of endurance, and low social support to increase the risk of living psychiatric disorder (Olashore, Akanni, Fela-Thomas, & Khutsafalo, 2021). Another systematic review on the impact of fear and concern about COVID-19 on job

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attributes has found the fear of COVID-19 to be associated with increased future career anxiety, perceived job insecurity, intention to leave work, and reduced job satisfaction (Rajabimajid, Alimoradi, & Griffiths, 2021).

Precautions that were taken against COVID-19 and its transmission have differed from country to country (Flaxman et al., 2020). In Turkey, there have been non-pharmaceutical interventions such as schools closures, rapid implementation of online education, travel restrictions, closures of public spaces like restaurants, cafés, bars and libraries, restrictions imposed on people who are under 20 or over 65 years of age and those with chronic diseases, enforcement of masks in public places and isolation of symptomatic individuals and their contacts (Güner, Hasanoglu, & Aktas, 2020; Ögütli, 2020). However, the precautions that were taken during this critical period pose potential threats to children and adolescents (Fegert, Vitiello, Plener, & Clemens, 2020). Because of school closures, adolescents have had to remain at home with their parents. With the regulations imposing a curfew for those 20 years of age and under, adolescents who participate actively in social life face a variety of psychological problems because their communication with others has been impacted, and they have not been able to socialize enough (Moroni, Nicoletti, & Tominey, 2020). A number of different behaviours have been reported as resulting from these measures; as parents and children try to adapt to new conditions they have experienced communication problems, rising tension levels, more outbursts of anger, depression and anxious states of mind and overuse of social media (Ögütli, 2020). Although these problems can be severe in children and adolescents, they may also be easily ignored (Wang, Zhang, Zhao, Zhang, & Jiang, 2020).

Individuals who believe that they are loved, valued and respected by those around them in times of need, such as during the pandemic, and who have adequate "social support", meaning that they feel supported in every case, have lower risks of physical and psychological disease (Taylor, 2011; Yang et al., 2020). This social support is especially critical for adolescents, because adolescence is a period in which they are already coping with a series of physical, emotional and social changes (Pinkerton & Dolan, 2007). Positive social interactions and social support have beneficial effects on the mental health conditions and well-being levels of adolescents (Park, 2004). A study that was conducted with adolescents in China during the COVID-19 pandemic found that only 24.6% of adolescents reported high levels of social support. In another study done during the pandemic, individuals who reported high levels of social support had lower risks of developing symptoms of depression (Grey et al., 2020). Therefore, there is a significant relationship between perceived social support and psychological well-being (Güngörmüş, Okanlı, & Kocabeyoğlu, 2015; Karal & Biçer, 2020). Furthermore, Killgore, Taylor, Cloonan, and Dailey (2020) found in their study with adults in the United States that individuals with high levels of social support had greater psychological strength (Killgore et al., 2020).

Psychological well-being is a dynamic process and helps to protect individuals during stressful life events (disease, violence, poverty, natural disaster, war and terror). It was found that individuals who had high levels of psychological wellness could cope with stressful and environmentally damaging situations (Bilge & Bilge, 2020; Bozdağ, 2020; Kasapoğlu, 2020). In previous research, it was stated that facing risky situations in childhood and adolescence, being involved in dangerous situations during those periods, and being unable to face these problems can cause individuals to be unhealthy in their next developmental stages (Masten, 2015). For this reason, the present research was conducted to determine the relationship between the perceptions of social support and psychological well-being among adolescents during the COVID-19 pandemic.

Research Questions

Q1. What is the level of perceived social support among adolescents during the COVID-19 pandemic?

Q2. What is the level of psychological well-being in adolescents during the COVID-19 pandemic?

Q3. Is there a relationship between the perceived social support and the psychological well-being of adolescents during the COVID-19 pandemic?

Q4. Do the demographic features of adolescents affect their perceptions of their social support and their psychological well-being?

2. Objective and methods

2.1. Study design

This research is considered to be definitive and relative, based on the web.

2.1.1. Sampling and setting

There were 378 participants, all of whom were adolescents aged from 13 to 18 years who were living in Turkey. Either the adolescents themselves or their parents used social media tools or sites such as Facebook, Whatsapp, Instagram etc., and they had all agreed to participate voluntarily. For this purpose, forms that were created in Google Form were sent to the participants through Facebook, WhatsApp, Instagram and email. In the introduction part of each form, a briefing was provided for the participants to inform them of the aim and extent of the research. The forms were accessed directly after the participants had read the introduction and approved it, and completing the data collection tools took about 10-15 min for each participant. The questionnaire was in Turkish. This research was conducted from December 15, 2020 to January 31, 2021. A posthoc power analysis was performed to determine the adequacy of the study's sample size. A 95% confidence interval was found in the power analysis to have a confidence interval with a 5% error margin, and the effect size and power were determined to be 96% ($n_1 = 197$, $n_2 = 181$, $X_1 = 93.51$, $SD_1 = 12.73$, $X_2 = 88.81$, $SD_2 = 11.90$). Power analysis showed that the amount of data collected was sufficient (Çapık, 2014).

2.1.2. Criteria for selection

The main criteria for inclusion in the study were being an adolescent in the 13–18-year-old age category, knowing how to read and write and participating voluntarily in the research.

2.2. Measures

Data were collected through the questionnaire form, the Multidimensional Scale of Perceived Social Support (MSPSS) and the Psychological Well-being Scale for Adolescents (PVSA). All the measures were Turkish versions.

2.2.1. Questionnaire form

This form includes eight questions that are prepared by research under the microscope of literature, including descriptive features such as age, gender, parents' jobs, income levels, family types, places of residence and time evaluation skills.

2.2.2. Multidimensional scale of perceived social support

The Multidimensional Scale of Perceived Social Support was originally developed by Zimet, Dahlem, Zimet, and Farley (1988) (Zimet et al., 1988). The Turkish version of the validity and reliability assessment of MSPSS was done by Eker and Arkar (1995). This scale is based on feedback on a 7 point Likert scale that includes 12 items and three sub-scales: family, friends and a special person. The lowest score that can be taken from the scale is 12, and the highest is 84. The more points that are gained, the higher the perceived social support will be. The internal consistency measured by Cronbach's alpha was 0.89 for the entire scale (Eker & Arkar, 1995). In this research, the Cronbach's alpha coefficient was 0.86.

2.2.3. Psychological well-being scale for adolescents

Psychological Well-being Scale for Adolescents was developed by Bulut, Doğan, and Altundağ (2013). This scale includes 29 items and six sub-scales in a 4 point Likert scale. The sub-scales are family support, school support, peer support, adaptation, empathy and struggle for self-determination. The lowest score that can be taken from this scale is 29, and the highest is 116. The more points that are acquired from the scale, the higher the psychological well-being will be. The internal consistency measured by Cronbach’s alpha was 0.87 for the entire scale (Bulut et al., 2013). In this research, the Cronbach’s alpha coefficient was 0.84.

2.3. Ethical consideration

Approval to conduct this research was received from the ethics committee (date: December 11, 2020; decision no: 6/26) and the Ministry of Health Scientific Research Platform of the Republic of Turkey (date: October 21, 2020). In addition, all participants were asked to provide written consent that they would not use this research aim or the extent of it and would not provide these answers anywhere else. Since it is crucial to ensure the security of personal rights, those who completed the forms confirmed that they participated on a “voluntary basis” and gave their “informed consents”.

2.4. Statistical analysis

The Statistical Package for the Social Sciences for Windows, version 20.0, was used for the statistical analysis of the data. This included numbers, percentages, means, independent samples *t* test, analysis of variance (ANOVA), Kruskal-Wallis H test, multiple regression analysis and correlation analysis.

3. Results

The mean age of the adolescents was 14.66 ± 1.65. Of the participants, 52.1% were females, 26.2% were in the 9th grade, 93.1% of their mothers were housewives, 48.4% of their fathers were self-employed, 49.5% of their families had balanced income and expense levels, 78.3% belonged to nuclear families and 69.8% lived in province centres. Of the 378 adolescents, 41.3% stated that they had watched television and surfed the Internet most of the time during the pandemic (Table 1).

According to the sub-scales of the MSPSS, the scores were 22.25 ± 6.69 for family support, 18.88 ± 7.63 for support from friends and 13.24 ± 8.63 for support from special people. With respect to the sub-scales of the PVSA, the scores were 23.47 ± 4.98 for family support, 16.21 ± 4.46 for peer support, 15.57 ± 4.09 for school support, 11.71 ± 2.12 for adaptation, 14.30 ± 2.57 for struggle for self-determination and 9.83 ± 2.03 for empathy (Table 2). The total mean scores for the MSPSS and PVSA were 54.39 ± 17.13 and 91.13 ± 12.34, respectively. When the total mean scores were evaluated, it was clearly seen that the adolescents participating in the study perceived that their social support levels were good and that their psychological well-being levels were also good (Table 2).

There was a significant difference between the genders in terms of their social supports and psychological well-being (*p* < 0.05). However, there were no statistically significant differences between the adolescents in terms of class, parents’ jobs, income levels, family types, their places of residence and their social support and psychological well-being (Table 3).

There was a positive and significant relationship between the total scores of the adolescents for social support and psychological well-being (Table 4).

According to the regression analysis performed in Table 5, when the significance level corresponding to the *F* value is considered, it is observed that the established model is statistically significant (*F*: 33.178; *p* < 0.05). When we look at the beta coefficient value, the *t* value, and the significance level of the argument, we see that gender,

Table 1
Characteristics of adolescents (n = 378).

Age (mean)	14.66 ± 1.65	
	n	%
Gender		
Female	197	52.1
Male	181	47.9
Class		
9	99	26.2
10	89	23.5
11	92	24.3
12	98	25.9
Mother’s Job		
Housewife	352	93.1
Worker	10	2.6
Government Employee	16	4.2
Father’s Job		
Worker	84	22.2
Government Employee	96	25.4
Medical Staff	15	4.0
Self-employee	183	48.4
Income Level*		
Income < Expense	141	37.3
Income = Expense	187	49.5
Income > Expense	50	13.2
Family Type		
Nuclear Family	296	78.3
Extended Family	69	18.3
Broken Family	13	3.4
Residential Place		
Province	264	69.8
District	68	18.0
Village	46	12.2
Time Evaluation Process during Pandemic		
Studying and reading book	146	38.6
Watching TV and surfing on the internet	156	41.3
Indoor activities with family	52	13.8
Constant sleeping	24	6.3

*According to personal statements of adolescents.

Table 2
MSPSS and PVSA Sub-scale and Mean, Minimum and Maximum Values of Total Scores.

Scales	Min-Max scores	Min-Max scores	(Mean ± SD)
MSPSS Sub Scales	Family support	4–28	22.25 ± 6.69
	Friendly support	4–28	18.88 ± 7.63
	Specially support	4–28	13.24 ± 8.63
Toplam MSPSS		12–84	54.39 ± 17.13
PVSA Sub Scales	Family support	7–28	23.47 ± 4.98
	Peer support	5–20	16.21 ± 4.46
	School support	5–20	15.57 ± 4.09
	Adaptation	4–16	11.71 ± 2.12
	Struggle Determination Empathy	5–20	14.30 ± 2.57
Toplam PVSA		29–112	91.13 ± 12.34

Abbreviations: MSPSS, Multidimensional Scale of Perceived Social Support; PVSA, Psychological Well-being Scale for Adolescents.

Table 3
Comparison of demographic features with total mean scores for MSPSS and PVSA.

	Total MSPSS Mean ± SD	Test and p	Total PVSA Mean ± SD	Test and p
Gender				
Female	56.75 ± 56.75	t = -2.592	93.51 ± 12.73	t = -1.022
Male	52.21 ± 52.21	p = .010	88.81 ± 11.90	p = .007
Class				
9	55.44 ± 16.83		90.96 ± 12.74	
10	53.17 ± 17.96	F = 0.317	91.43 ± 13.45	F = 0.037
11	53.93 ± 16.93	p = .813	90.90 ± 12.00	p = .990
12	54.85 ± 17.03		91.24 ± 11.35	
Mother's Job				
Housewife	54.29 ± 17.23		91.00 ± 12.37	
Worker	56.00 ± 11.35	KW = 0.465	97.00 ± 4.80	KW = 2.268
Government Employee	55.56 ± 18.67	p = .792	90.25 ± 14.50	p = .322
Father's Job				
Worker	52.89 ± 15.99		91.25 ± 11.53	
Government Employee	55.90 ± 18.30		91.41 ± 13.52	
Medical Staff	60.20 ± 11.76	KW = 3.485	94.80 ± 8.03	KW = 2.021
Self-employee	53.80 ± 17.34	p = .323	90.63 ± 12.37	p = .568
Income Level*				
Income < Expense	52.76 ± 16.62		90.11 ± 11.86	
Income = Expense	55.88 ± 21.10	KW = 2.154	90.74 ± 16.22	KW = 2.946
Income > Expense	55.21 ± 16.32	p = .341	92.01 ± 11.49	p = .229
Family Type				
Nuclear Family	54.53 ± 17.03		90.66 ± 12.56	
Extended Family	53.72 ± 16.36	KW = 0.192	92.73 ± 11.06	KW = 1.733
Broken Family	54.61 ± 23.86	p = .908	93.23 ± 13.69	p = .421
Residential Place				
Province	54.40 ± 17.02		91.19 ± 12.21	
District	54.85 ± 18.21	F = 0.067	91.01 ± 12.03	F = 0.010
Village	53.65 ± 16.47	p = .935	90.97 ± 13.75	p = .990

* According to personal statements of adolescents.
Abbreviations: MSPSS, Multidimensional Scale of Perceived Social Support; PVSA, Psychological Well-being Scale for Adolescents.

Table 4
Relationship between total scores for MSPSS and PVSA.

MSPSS	PVSA
	r = 0.678**
	p = 000

Note: r = Pearson correlation.
Abbreviations: MSPSS, Multidimensional Scale of Perceived Social Support; PVSA, Psychological Well-being Scale for Adolescents.
**Correlation is significant at the 0.001 level (two-tailed).

and PVSA total score had a statistically significant impact on the total score of MSPSS (t = 2,455, p < 0.05; t = 17,252, p < 0.05). This figure explains 47.5 percent of the gender change and the overall PVSA score (Revised R2 = 0.475). A 1-unit increase in gender variables leads to a 3,498 (β = 3,498) increase in the total score of MSPSS, and a 1-unit increase in the total score variable of PVSA causes an increase of 0,942 (β = 0,942). The established model has no problem with auto-correlation. The Durbin W value is between 1.5 and 2.5 (DW = 2.040).

4. Discussion

This research is the first to determine the relationship between perceived social support and psychological well-being in the adolescent population during the COVID-19 pandemic. Daily changes that took place during the pandemic have a significant impact on children and adolescents (Fegert et al., 2020). It is important for adolescents to cope on a daily basis, and the extent to which they receive social support during this difficult period is important for their psychological strength. Because of this, it is believed that the findings of this study are valuable for determining the appropriate levels of social support and psychological well-being. The results that were obtained from this study were discussed in terms of the literature.

According to the research results, 41.3% of adolescents indicated that they spent most of their time watching television and surfing the Internet during the COVID-19 pandemic (Table 1). Chen, Chen, Pakpour, Griffiths, and Lin (2020) reported that school-aged children spent more time on their smartphones and using social media (Chen et al., 2020). Research has shown that teenagers who watch television for long periods and spend a lot of time on the Internet have lower social supports (Chen & Hu, 2012; Gao, Gao, & Wang, 2011). During the COVID-19 pandemic, lifestyle and living patterns were obligatorily changed. In order to control the spread of COVID-19, children are encouraged to stay at home and use the Internet to participate in daily activities, including teaching/learning, socializing, and leisure activities. For these reasons, children going to school are more likely to be exposed to online activities during the COVID-19 outbreak than before (Chen et al., 2021). It has been reported that there has been an increase in the prevalence of internet addiction during the COVID-19 pandemic compared to the pre-COVID-19 pandemic (Siste et al., 2020). Such long-term exposure to the Internet may increase the risks of developing problematic Internet use. In a prospective cohort study of a healthy adolescent population, it has been found that the problematic use of the Internet is associated with increased levels of depression and anxiety symptoms (Thom, Bickham, & Rich, 2018). For these reasons, parents should be encouraged to understand and monitor their children's use of smartphones and social media during the COVID-19 pandemic. During the COVID-19 pandemic, more attention should be paid to relationships between problematic smartphone app usage, problematic social media use, and psychological distress.

This study determined that the levels of support provided to adolescents by families, friends and other important people are acceptable. Because the physiological and psychological effects of infectious diseases are corrosive, individuals may need supportive networks (Kara & Biçer, 2020). The social support concept is known to have a protective effect, as a buffer against adverse conditions and troubling life experiences for the individuals (Lin, Thompson, & Kaslow, 2009). Individuals can meet their social support needs from their closest social circles, families and friends (Kara & Biçer, 2020). Knowing that others are present when necessary gives individuals a sense of confidence, and this affects the individuals' cognitive states and emotions positively (Cohen, Underwood, & Gottlieb, 2000). Qi et al. (2020) reported that only 24.6% of adolescents stated that they had high levels of social support, with 70% of them reporting intermediate levels of social support and 5.4% reporting low levels of social support in a study conducted with adolescents in China on March 15, 2020 (Qi et al., 2020). During the COVID-19 outbreak, mental health problems were more common among

Table 5
Multiple Regression Results on the Effect of Descriptive Characteristics on the MSPSS Total Score.

Model	β	Std. Error	Beta	t	p	Partial	Part	Tolerance	VIF
Gender	3.498	1.425	0.102	2.455	0.015	0.127	0.093	0.827	1.209
Class	-0.081	0.608	-0.005	-0.133	0.895	-0.007	-0.005	0.877	1.140
Mother's Job	1.324	1.567	0.033	0.845	0.399	0.044	0.032	0.931	1.074
Father's Job	0.521	0.553	0.038	0.943	0.346	0.049	0.036	0.868	1.152
Income Level*	0.199	0.715	0.011	0.279	0.781	0.015	0.011	0.962	1.039
Family Type	-2.051	1.308	-0.061	-1.568	0.118	-0.082	-0.059	0.953	1.049
Residential Place	0.122	0.996	0.005	0.123	0.902	0.006	0.005	0.867	1.154
PVSA Total	0.942	0.055	0.679	17.252	0.000	0.669	0.653	0.925	1.081

* According to personal statements of adolescents.

MSPSS, Multidimensional Scale of Perceived Social Support; PVSA, Psychological Well-being Scale for Adolescents.

R: 0.689 R2: 0.475F: 33,178p < 0.05 Durbin Watson:2.040.

adolescents with moderate and low social supports than among others in China; it was concluded that social support is a protective factor for mental health among adolescents (Qi et al., 2020). Grey et al. (2020) found that individuals who reported high levels of social support had lower risks of exacerbating depressive symptoms than those with low perceptions of social support (Grey et al., 2020). Social support in times of crisis is emphasized as a coping mechanism (Saltzman, Hansel, & Bordnick, 2020).

According to the present study, the levels of psychological well-being among adolescents were found to be good. Being exposed to and experiencing adversity or difficulties is important for young people in developing their capacities to cope with stressful experiences, enhancing their skills, and improving their well-being (Masten, 2015). While environmental stressors can increase children's susceptibilities to mental health problems, multiple protective factors offer opportunities for them to develop psychological well-being, which is a positive adaptation to adversity (Stark, White, Rotter, & Basu, 2020). Indeed, it is particularly important that people are able to keep their psychological well-being at high levels during epidemics and indeed pandemics such as the recent one. When the literature is examined, studies conducted during the COVID-19 outbreak showed that levels of psychological well-being were high (Kimter, 2020; Yakup & Çelik, 2020).

When the literature is examined, along with the increases in levels of psychological well-being, depression, and anxiety levels decreased; individuals with increased psychological well-being improved their tolerances to uncertainty and reduced their anxiety levels (Bozdağ, 2020; Kasapoğlu, 2020). As a result of the research conducted by Bilge and Bilge (2020), it was concluded that psychological well-being plays a protective role against the psychological symptoms caused by epidemics and pandemics such as that of COVID-19 (Bilge & Bilge, 2020). Considering the research (Bilge & Bilge, 2020; Bozdağ, 2020; Kasapoğlu, 2020; Kimter, 2020; Yakup & Çelik, 2020), it can be said that psychological well-being is an essential protective factor in cases of mass distress, and psychological well-being in particular plays a determining role in the ability to cope effectively with this process.

The present study found a significant difference between the genders with regard their perceptions of social support and in their levels of psychological well-being ($p < 0.05$). In the study, the perceived social support and the psychological well-being levels of the female participants were higher than those of the males. More specifically, the result of the regression analysis showed that the gender variable had a significant relationship with PVSA and MSPSS. There are studies in the literature that support these research results (Demir & Çiftçi, 2020; Karataş, 2012; Reeve & Maslach, 2001). Demir and Çiftçi (2020) concluded that women have higher levels of psychological strength than men in a study conducted on 223 high school students (Demir & Çiftçi, 2020). A study by Karataş (2012) also found that the level of social support perceived by female students is higher than that of males (Karataş, 2012). Reeve and Maslach (2001) have stated that the adolescent females' perceptions of having higher levels of social support could be due to both a set of specific characteristics among women and a

variety of social differences between men and women (Reeve & Maslach, 2001).

The present study found that there is a statistically positive and strong relationship between the total scores of the adolescents regarding their perceptions of social support and their psychological well-being. Other studies have concluded that there is a significant relationship between psychological well-being; that higher average scores for perceived social support correlate to higher average scores for psychological well-being (Güngörmüş et al., 2015; Karal & Biçer, 2020; Wilks, 2008). Indeed, perceived social support and perceived psychological well-being can be considered to be defence mechanisms that protect people against stress and traumas. Perceiving support from their families and the environments around them can help people to remain psychologically stable during epidemics such as that of COVID-19 (Karal & Biçer, 2020). Being able to handle stressful and traumatic situations and learning to adapt to these is important, especially for healthy development among adolescents. The findings of this study provide evidence to support the implementation of strategies to increase social support and psychological well-being.

5. Limitations

The limitations of this study are as follows. First, since the research involved adolescents aged 13-18, we had to take into consideration the risks during the pandemic and therefore used online questionnaires accessed through phones, the Internet, and social media tools or sites. The use of self-declaration is pro-social desirability so the results may not be able to be generalised to all adolescents. Second, the study group does not meet the exclusion criteria for determining whether any participants had psychiatric disorders and/or whether any had COVID-19 or had family members who had been infected or had died from this disease. Third it is cross-sectional study that may not provide definitive information in causal relationships between the variables being investigated and studied.

6. Conclusion

The study found that the adolescents who participated in it perceived that they had good support from their families, friends and other important people as well as high levels of psychological well-being during the COVID-19 pandemic. There was a positive and significant relationship between perceived social support among the adolescents and their psychological well-being; indeed, a correlation was found between increased psychological well-being and higher levels of perceived social support. The study also concluded that the genders of the adolescents affected their perceptions regarding social support and their psychological well-being.

7. Suggestions and recommendations

Determining the risks involved and factors that could protect again

these during the pandemic period will contribute to the determination of policies to be followed to protect the physical and psychological health of individuals. Increasing social support and performing activities that would improve psychological well-being are among these protective factors. In addition, adolescents should be provided with ways to be in open and close communication with their families, friends and teachers during a pandemic period such as this. Some opportunities that could be offered to them include interaction with their teachers and receiving psychological counselling when necessary.

CRedit authorship contribution statement

Fatma Kurudirek: Conceptualization, Methodology, Investigation, Writing – original draft, Formal analysis, Writing – review & editing.
Duygu Arıkan: Conceptualization, Methodology, Investigation, Writing.
Sümeyye Ekici: Investigation, Writing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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