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Multiple Mediation of Self-Esteem, Perception of Social Self-efficacy, and Social Anxiety in the Relationship Between Peer Support and Autonomy in Adolescents

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Abstract

The aim of this study is in the relationship between peer support and autonomy in adolescents; The aim of this study is to examine the mediating role of social self-efficacy perception, self-esteem and social anxiety variables in adolescents. The study group of the research consists of 462 high school students (237 women and 225 men). Of the students in the study group, 26% (120 people) were in the 9th grade, 28.6% (132 people) were in the 10th grade, 28.1% (130 people) were in the 11th grade and 16.5% (76 people) are studying in the 12th grade. Data collection tools used in the study; Adolescent Social Anxiety Scale, Rosenberg Self-Esteem Scale (Short Form), Social Self-Efficacy Perception Scale, Peer Support Scale, Adolescent Autonomy Scale were used. The data were analyzed with Regression-based method and Bootstrap methods. According to the findings obtained from the study, it was observed that as peer support increases in adolescents, individuals' self-esteem and social self-efficacy perceptions increase, and as a result, their autonomy levels increase. In addition, it is seen that the increase in peer support in adolescents decreases the social anxiety of the individuals and thus the level of autonomy increases. In addition, it was found that the established model explained 41% of autonomy in adolescents.

Keywords: Peer Support, Self-Esteem, Autonomy in Adolescents, Social Anxiety in Adolescents, Perception of Social Self-Efficacy.

1. Introduction

Adolescence is a period in which developmental growth and development are quite rapid. During this period, the individual matures not only physiologically but also spiritually (Greenfield, Keller, Fuligni, & Maynard, 2003). In this rapid change process, the adaptation of individuals to themselves and the outside world is shaken and they can go through a very turbulent and stressful process in adapting to new situations in order to survive. In the process of adaptation, the adolescent reconstructs his feelings, thoughts and behaviors (Lerner & Castello, 2002). Therefore, there are many duties and responsibilities that the individual has to undertake in adolescence, which is

the process of preparation for adulthood. These developmental tasks and responsibilities can bring along very important opportunities for adolescents in terms of risk taking, resilience and creating opportunities (Giedd, 2015). In this period, which Erickson (1969) defines as the process of gaining identity, the effort of the adolescent to create a unique identity is considered as the most important developmental task. Overcoming this period is like finding the bed of an enthusiastic river, and during this period, the effort to get independent from the parents, to review social values and to find a way for oneself is dominant (Öztürk, 2004). Although each individual in adolescence can experience this period in different ways, it is important for many individuals in this period to develop a sense of autonomy (Noom, Decovic & Meesus, 2001). Autonomy efforts increase during adolescence and adolescents may exhibit risk-taking behavior in order to gain autonomy and create identity (Curtis, 1992). A balanced meeting of the adolescent's need for autonomy is considered a developmental milestone in order to maintain a healthy pre-adolescence period (Ryan, Deci, Grolnick & La Guardia, 2006; Hortaçsu, 2003; Noom, 1999).

Noom, Decovic & Meesus (2001) stated that autonomy consists of three dimensions: behavioral, emotional and functional autonomy. Behavioral autonomy, ability to choose options, make decisions and set goals; emotional autonomy, confidence in one's own choices and goals; Functional autonomy has also been defined as the ability to develop strategies to achieve one's purpose. The autonomy experienced during adolescence is explained in various ways in different theoretical frameworks. While psychodynamic theorists emphasize autonomy as the evolution of the parent-adolescent relationship into a more egalitarian form, that is, its separation; Cognitive theorists have emphasized that autonomy is a structure that manifests itself with the development of the ability to make decisions, take control of one's life, make choices, and take responsibility (Noom, Decovic & Meesus, 2001). While Deci & Ryan (2000) define autonomy as a need from the perspective of self-efficacy, they stated that this need could be met when the individual sees himself as the source of his own actions. Steinberg & Silverberg (1986) describe autonomy as the adolescent's ability to express himself through reasoning about decision making, self-management, self-confidence and moral issues by resisting the pressures exerted by his parents and peers. Noom, Decovic & Meesus (1999) on the other hand; They define these values as the ability to be confident about their goals and decisions without feeling the pressure of approval and to reflect this on their behavior in the way they determine.

During adolescence, the individual tends to see his peers as more authority figures (Furman, Simon, Shaffer & Bouchey, 2002) while reducing his contact with his parents (Hazan & Zeifman, 1999). According to the approaches built on the basis of interpersonal relations, significant changes occur in the child-parent relationship during adolescence, but this is not seen as a relational break. According to this perspective, the adolescent can be autonomous without completely breaking away from the family and without harming their relationships (Kağıtçıbaşı, 1996). However, adolescents may turn to their peers due to insufficient autonomy in their relationships with their parents (Blos, 1967). It is stated that friend groups mediate the adolescents to resolve their conflicts and to get rid of their dependence on their parents (Arnett, 2000). It can be defined as a system of giving and receiving assistance based on the basic principles of peer support, respect, mutual responsibility and mutual agreement about what is beneficial (Mead, Hilton & Curtis 2001). At the same time, peer support is an inclusive model that includes helping individuals fully experience who they are, develop in line with their own choices, and restructure larger systems in the process of being supported in these goals (Mead, Hilton & Curtis 2001). Based on these statements, it can be said that peer support is a structure that contributes to the autonomy of the adolescent (Özdemir & Çok, 2011) and being a social individual (Mead, Hilton & Curtis 2001). When the studies are examined, it is seen that there is a positive and significant relationship between social support and autonomy (Bryan, Quist, Young, Steers & Lu, 2015).

During adolescence, individuals' self-development accelerates and emotions and behaviors are mostly regulated by the adolescent himself (Zimmer Gembeck & Collins, 2003). Self-esteem is defined as an individual's self-acceptance and self-satisfaction as a result of self-evaluation (Eriş & İkiz, 2013). Rosenberg (1965), on the other hand, conceptualized self-esteem as the attitude that an individual has as a result of his evaluations of himself. It is very important for the individual in adolescence how he is seen and perceived by the people around him. Being supported by peers, who have a very important place in adolescence life, helps the adolescent to increase his self-esteem by emphasizing that he is a lovable and valuable individual (Black & McCartney, 1997). Taysi

(2000) emphasized that social support supports the formation of a healthy self-perception by arousing a sense of competence and success in the individual. Adler, on the other hand, states that individuals can develop a strong sense of self only by meeting their social attention needs (Steffenhagen, 1990). It is stated that the self-esteem of individuals who are not supported by their peers decreases (Şad, 2007). Studies also show that there is a positive and significant relationship between individuals' perceived peer support and their self-esteem (Lan & Wang, 2019; İkiz & Çakar, 2010; Friedlander, Reid, Shupak & Cribbie, 2007; Ladd, 1999; Noom, 1999; Bolger, Patterson & Kupersmidt, 1998; Brown & Lohr, 1987; Rohner & Rohner, 1980).

Self-efficacy, another variable of the research, is a very important variable in understanding adolescent autonomy (Noom, Decovic & Meesus, 2001). Deci & Ryan (2000) argue that individuals have an internal need that motivates them to be the initiator of their own actions, and that the forms of relationships established with others also support the development of autonomy. In other words, the quality relationship patterns that individuals establish in the social context play an important role in the development of autonomy.

Due to the developmental period, individuals in this period tend to meet their social needs by communicating and interacting, however, they may experience negative evaluation, ridicule and humiliation concerns (Mehtalia & Vankar, 2004). Considering that peer support has a very important place in adolescence, it may turn into an expected situation for them to experience anxiety in a social context. Social anxiety is defined as the intense fear of embarrassment, humiliation, negative evaluation by others in the social environment, and the tendency to avoid these feared situations (American Psychiatric Association, 1994). Beck (2005) characterizes social anxiety as an evaluation anxiety and emphasizes that with this anxiety, the individual may tend to avoid social environments. The possibility of rejection can be shown as the main reason underlying avoidance (Leary & Kowalski, 1995). Based on these statements, it can be said that social support has a very important place as a determinant of social anxiety in adolescence. According to studies, it is seen that lack of social support causes social anxiety especially in adolescents (Erath, Flanagan & Bierman, 2007; Calsyn, Winter & Burger, 2005). It is expected that the adolescent who is supported by his social environment will be able to express himself more easily in the social context, to reveal his existence without worry, to improve himself and to reflect himself as he is. Adolescents who think that they are not supported by their social environment tend to mask themselves by worrying about being negatively evaluated by their peers (Beck and Emery, 1985). At the same time, socially anxious individuals may tend to identify with other individuals in order to be approved by them, they may be reluctant to conform more to others, to reveal themselves less, and to present themselves (Patterson & Ritts, 1997). This may result in the adolescent withdrawing from himself without expressing himself autonomously, not developing a healthy identity for himself and not revealing the essence inside him. This situation may negatively affect the development of identity, which is considered as the most important developmental crisis of adolescence. Studies also support that there is a negative relationship between anxiety and autonomy, that is, as individuals' anxiety levels increase, their tendency to act independently, make decisions and express themselves decreases due to negative evaluation concerns (Lüle, 2002).

Research and theoretical explanations show that understanding and explaining autonomy in adolescence is very important from a developmental perspective. In this context, it is thought that explaining the structure with the variables discussed will contribute to the field. Within the scope of the research, it is aimed to find answers to the following research questions by examining the related psychological structures and the relationships between them.

Research questions;

1. Does the perception of social self-efficacy have a mediating role between peer support and autonomy in adolescents?
2. Is there a mediating role of self-esteem between peer support and autonomy in adolescents?
3. Is there a mediating role of social anxiety in adolescents between peer support and autonomy?
4. Do perceptions of social self-efficacy, self-esteem, and social anxiety in adolescents mediate multiple ways between peer support and autonomy in adolescents?

2. Method

2.1. Research Design

This study, which examines the mediating role of social self-efficacy, self-esteem, and social anxiety in adolescents in the relationship between peer support and autonomy are in the type of relational screening model. In correlational screening models, it is aimed to investigate the relationships between variables (Fraenkel & Wallen, 2011; Heppner, Wampold & Kivlighan, 2013).

2.2. Participants

A private school, a science high school, and three Anatolian high schools with different success rankings were reached in order to reach students from various socio-economic and achievement levels in determining the study group of the research. Data were collected from students in the 9th, 10th, 11th, and 12th grades from these schools. The convenience sampling method was used to determine the study group of the research (Erkuş, 2009). This study was carried out with the participation of 462 high school students, 237 of whom were women and 225 were men. Of the students in the study group, 26% (120 people) were in the 9th grade, 28.6% (132 people) were in the 10th grade, 28.1% (130 people) were in the 11th grade and 16.5% (76 people) are studying in the 12th grade.

2.3. Data Collection Tools

Adolescent Autonomy Scale: Noom et al. (2001) aims to measure the perceptions of adolescents between the ages of 12-18 about their autonomy. It consists of three sub-dimensions: attitudinal, emotional, and functional autonomy. The scale, which consists of a total of 19 items, has a 5-point Likert-type rating. The Cronbach Alpha internal consistency coefficient calculated for the original scale was 0.71, 0.60 and 0.64 for attitudinal, emotional, and functional autonomy, respectively. The adaptation study of this scale was carried out by Musaağaoğlu (2004). Test-retest reliability was found to be 0.96. In the factor analysis, the adolescent autonomy scale exhibited a two-dimensional structure called behavioral and emotional autonomy in Turkish culture. The Cronbach Alpha internal consistency coefficients for behavioral and emotional autonomy were found to be 0.71 and 0.51, respectively. The Cronbach Alpha internal consistency coefficient calculated within the scope of this study is 0.78.

Peer Support Scale: Kuo et al. (2007) is a 4-point Likert-type scale consisting of 17 items. It has three sub-dimensions as physical, academic, and emotional help. The Cronbach Alpha internal consistency coefficient for the scale was calculated as 0.94. As the score obtained from the scale increases, it can be interpreted that the perceived peer support increases. The Cronbach Alpha internal consistency coefficient of the scale, whose validity and reliability studies were conducted by Çalışkan and Çınar (2012), was found to be 0.93. The test-retest correlation coefficient is 0.703. In the validity study, it was determined that the Kendal W coefficient calculated between experts did not show a significant difference. Again, as a result of the exploratory factor analysis, it was concluded that the structure was compatible with theory and literature. Within the scope of this study, the Cronbach Alpha internal consistency coefficient was calculated as 0.93.

Social Self-Efficacy Perception Scale: It was developed by Smith and Betz (2000). The 25-item scale is a 5-point Likert-type scale scored between I have no confidence (1)- I have complete confidence (5). It was adapted by Palanci (2004). In the construct validity study, it was determined that the whole scale was gathered under a single factor. The Cronbach Alpha internal consistency coefficient was 0.89 and the test-retest reliability was calculated as 0.82. Within the scope of this study, the Cronbach Alpha internal consistency coefficient was calculated as 0.93.

Rosenberg Self-Esteem Scale (Short Form): Developed by Rosenberg (1965). Adaptation studies were made by Çuhadaroğlu (1986) and Tuğrul (1996). Five items of the scale consisting of 10 items are scored positively and

five items are scored negatively. It is a 4-point Likert scale. Çuhadaroğlu (1986) found the test-retest reliability for the scale to be 0.71 and the Cronbach Alpha internal consistency coefficient to be 0.76. Within the scope of this study, the Cronbach Alpha internal consistency coefficient was calculated as 0.82.

Adolescent Social Anxiety Scale: Developed by La Greca and Lopez (1998). The scale has a three-factor structure consisting of 22 items, 4 of which are control items. The Cronbach Alpha internal consistency coefficients obtained as a result of the studies are in the range of 0.66-0.91. The validity and reliability studies of the Turkish scale were carried out by Aydın and Tekinsav Sütçü (2007). As a result of the factor analysis, the researchers obtained three sub-dimensions as in the original structure. The coefficients found as a result of the correlation analysis performed with scales measuring similar structures were reported as 0.66-0.75. The two-half reliability was reported as 0.85 and the Cronbach Alpha internal consistency coefficient as 0.88. Within the scope of this study, the Cronbach Alpha internal consistency coefficient was calculated as 0.87.

Personal Information Form: A personal information form was created by the researchers in order to define the study group, in which information about school type, gender, and class level was collected.

2.4. Data Analysis

High school students who voluntarily participated in the study filled out the personal information form and the measurement tools in which the measurement tools were presented together. It took approximately 20-30 minutes for the individuals participating in the study to answer the measurement tools. Descriptive statistics were used to define the study group and Pearson correlation coefficients were calculated. The model tested in the study was examined with the Regression-based method and Bootstrap methods using the software developed by Hayes (2012,2013). To perform these analyzes, PROCESS Macro working with the SPSS program was used. Model 4 was used for multiple mediation analysis. The bootstrap method was carried out on 5000 samples. The significance level was .05.

3. Results

The Pearson correlation coefficients to examine the relationships between the variables in the study, and the descriptive statistics to describe the variables used in the study are presented in Table 1.

Table 1: Pearson Correlation Coefficients and Descriptive Statistics

| Variables | 1 | 2 | 3 | 4 | 5 |
|---|----------|----------|----------|----------|--------|
| 1. Peer Support in Adolescents | - | | | | |
| 2. Social Self-Efficacy Perception | 0,346** | - | | | |
| 3. Self-Esteem | 0,133** | 0,397** | - | | |
| 4. Social Anxiety in Adolescents | -0,136** | -0,368** | -0,362** | - | |
| 5. Autonomy in Adolescents | 0,153** | 0,416** | 0,569** | -0,451** | - |
| Mean | 46,937 | 87,470 | 34,504 | 39,481 | 58,829 |
| Standart Deviation | 11,986 | 19,673 | 5,885 | 11,034 | 8,850 |
| Skewness | -0,289 | -0,129 | -0,104 | 0,536 | 0,001 |
| Kurtosis | -0,105 | -0,142 | -0,611 | 0,211 | -0,019 |

**p<0,01

When Table 1 is examined, the variables of peer support and perception of social self-efficacy ($r=.35$, $p<.01$), self-esteem ($r=.13$, $p<.01$), and autonomy ($r=.15$, $p<.01$) in adolescents. It is seen that there are positive and significant relationships between adolescents and social anxiety ($r=-.14$, $p<.01$) in the negative direction. There was a positive correlation between the perception of social self-efficacy and self-esteem ($r=.40$, $p<.01$), autonomy in adolescents ($r=.42$, $p<.01$), and social anxiety in adolescents ($r=-.37$, $p<.01$).), a negative significant relationship was observed between It is seen that there is a negative relationship between self-esteem and social anxiety in adolescents ($r=-.36$, $p<.01$) and a positive relationship between autonomy ($r=.57$, $p<.01$) in adolescents. It is seen that there is a negative significant relationship between social anxiety in adolescents and

autonomy in adolescents ($r=-.45$, $p<.01$). In addition, it is seen that the kurtosis skewness values for the variables are in the range of ± 1.5 .

Details on the results of the parallel multiple mediation test of social self-efficacy perception, self-esteem and adolescent social anxiety variables in the relationship between peer support and autonomy in adolescents are given in Figure 1.

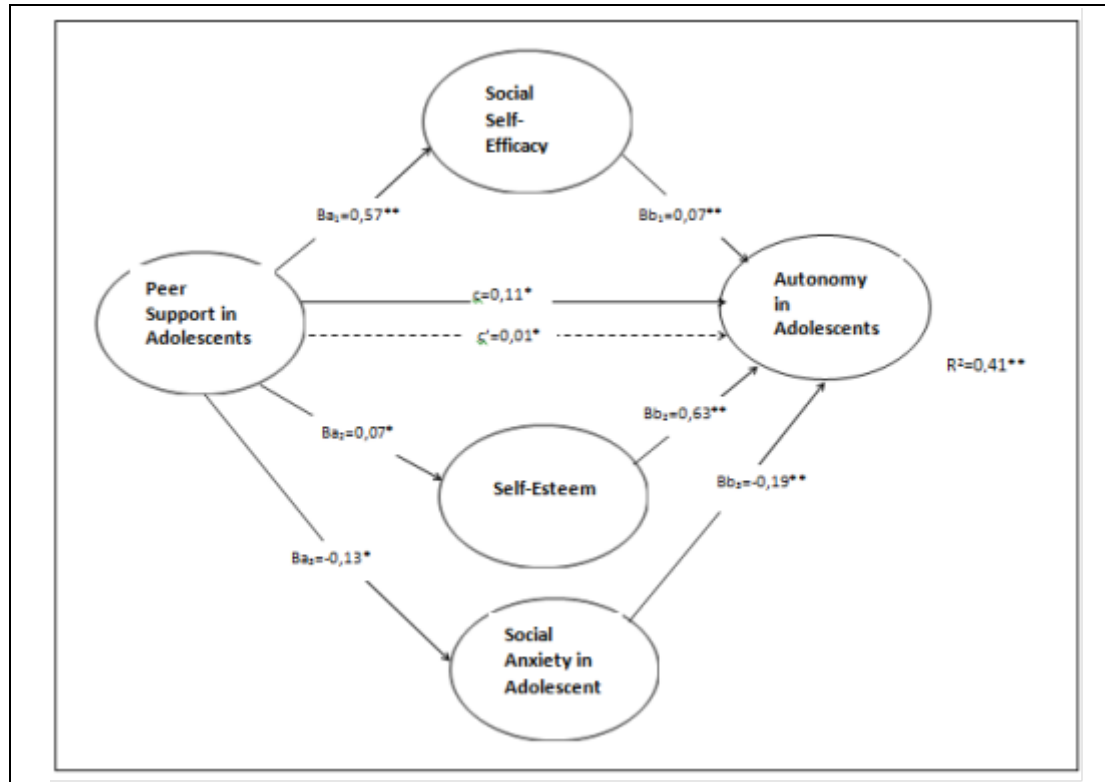


Figure 1: Parallel Multiple Mediation and Unstandardized Beta Coefficients of Social Self-Efficacy, Self-Esteem and Social Anxiety Variables in Adolescents in the Relationship Between Peer Support and Autonomy in Adolescents. * $p<.05$, ** $p<.001$

When Figure 1 is examined, the overall effect of peer support on autonomy in adolescents ($c= .11$, $SH= .03$, $t= -3.31$, $p<.05$) is significant. The mediating variables of peer support were perception of social self-efficacy ($Ba_1=0.57$, $SD= .07$, $t= 7.91$, $p<.001$), self-esteem ($Ba_2=0.07$, $SD= .02$, $t= 2.87$, $p<.05$), direct effects on social anxiety ($Ba_3=-0.13$, $SH= .04$, $t= -2.94$, $p<.05$) in adolescents are significant. Considering the direct effects of mediator variables on autonomy in adolescents, social self-efficacy perception ($Bb_1=0.07$, $SH= .02$, $t= 3.74$, $p<.001$), self-esteem ($Bb_2=0.63$, $SH= .06$, $t= 10.35$, $p<.001$), its direct effects on social anxiety in adolescents ($Bb_3=-0.19$, $SH= .03$, $t= -6.01$, $p<.001$) were found to be significant. When peer support in adolescents and all other variables were processed simultaneously, the relationship between peer support and autonomy in adolescents decreased and the significance value disappeared in terms of direct effect ($c'= .01$, $SH= .03$, $t= 0.25$, $p>.05$). According to these results, it is seen that three mediating variables fully mediate the relationship between peer support and autonomy in adolescents. In addition, it was found that the whole model was significant ($F(4-457)=80.45$, $p<.001$), and the established model explained 41% of autonomy in adolescents. Table 2 shows the indirect effects and specific indirect effects of peer support on autonomy in adolescents through the perception of social self-efficacy, self-esteem, and adolescent social anxiety.

Table 2: Comparisons of Indirect Effects and Specific Indirect Effects of Peer Support on Adolescents' Autonomy via Perception of Social Self-Efficacy, Self-Esteem, and Adolescent Social Anxiety

| Effects | Point Estimation | SE | z | p | Bootstrap | |
|--|------------------|--------|--------|--------|-----------|---------------------|
| | | | | | %95 BCa | Confidence Interval |
| | | | | | Low | High |
| Total Indirect Effects | 0,1056 | 0,0235 | | | 0,0600 | 0,1533 |
| Social Self-Efficacy Perception | 0,0407 | 0,0133 | 3,3595 | 0,0008 | 0,0188 | 0,0710 |
| Self-Esteem | 0,0409 | 0,0161 | 2,7564 | 0,0058 | 0,0121 | 0,0763 |
| Social Anxiety in Adolescents | 0,0240 | 0,0097 | 2,6138 | 0,0090 | 0,0079 | 0,0460 |
| Comparisons | | | | | | |
| C1 | -0,0003 | 0,0215 | | | -0,0451 | 0,0403 |
| C2 | 0,0166 | 0,0167 | | | -0,0153 | 0,0509 |
| C3 | 0,0169 | 0,0172 | | | -0,0156 | 0,0524 |

N=462, BCa: Sample of 5000 Bootstrap (bias-corrected and accelerated)

The significance of indirect effects was tested in the model tested using 5000 Bootstrap samples. The confidence interval value is 95%. When Table 2 is examined, the total indirect effect of peer support on autonomy through the variables of perception of social self-efficacy, self-esteem, and social anxiety in adolescents is statistically significant (point estimate= .1056 and 95% BCa CI [.0600, .1533]). In the effect of peer support on autonomy in adolescents, perceptions of social self-efficacy (point estimate= .0407 and 95% BCa CI [.0188, .0710]), self-esteem (point estimate= .0409 and 95% BCa CI [.0121, .0763]) and adolescents, mediation of social anxiety (point estimate= .0240 and 95% BCa CI [.0079, .0460]) was statistically significant. In addition, pairwise comparisons of the effects of mediating variables (C1, C2, C3) were not found statistically significant as there was zero in the point estimation interval according to 95% BCa confidence intervals. In addition to all these, according to the results of the Sobel test, the mediation of three mediator variables was found to be significant ($z_1=3.36$, $p<.001$; $z_2=2.76$, $p<.01$; $z_3=2.61$, $p<.01$).

4. Discussion, Conclusion and Recommendations

In this study, it was aimed to test whether social self-efficacy perception, self-esteem and social anxiety variables in adolescents mediate the relationship between peer support and autonomy in adolescents. As a result of the study, it was found that the mediations of social self-efficacy, self-esteem and social anxiety in adolescents were statistically significant.

According to the findings obtained from the study, it was observed that as peer support increases in adolescents, individuals' self-esteem and social self-efficacy perceptions increase, and as a result, their autonomy levels increase. In addition, it is seen that the increase in peer support in adolescents decreases the social anxiety of the individuals and thus the level of autonomy increases. In addition, it was found that the established model explained 41% of autonomy in adolescents.

It is thought that how the individual is perceived by those around him during adolescence, whether they are supported by their peers or not is important in shaping the perceptions of individuals about their self. Adolescents who are supported by their peers see themselves as a more lovable and valuable individuals, so their self-esteem increases (Black & McCartney, 1997). It is supported by the literature that the individual who receives social support will experience the feelings of competence and success more intensely and will support the creation of a healthy self-perception (Taysi, 2000). In addition, Adler states that individuals can develop a strong sense of self only by meeting their social attention needs (Steffenhagen, 1990). In addition, it is stated in the literature that when adolescents do not receive support from their peers, their self-esteem drops (Lan & Wang, 2019; Şad, 2007; İkiş & Çakar, 2010; Friedlander, Reid, Shupak & Cribbie, 2007; Ladd, 1999; Noom, 1999; Bolger, Patterson & Kupersmidt, 1998; Brow & Lohr, 1987; Rohner & Rohner, 1980).

While Deci & Ryan (2000) defines autonomy as a need from the perspective of self-efficacy, it is thought that the individual's satisfaction with himself will be directly affected when it is considered that this need can be met when the individual sees himself as the source of his own actions. It is thought that the quality relationship patterns that individuals establish in the social field play an important role in the development of autonomy. Therefore, the social self-efficacy of adolescents who receive peer support will be supported. When the literature is examined, the views of Deci & Ryan (2000) that the forms of relationships with others also support the development of autonomy strengthen this idea. At the same time, it is stated that self-efficacy is a very important variable in understanding adolescent autonomy (Noom, Decovic & Meesus, 2001).

Due to the developmental period in adolescence, individuals tend to meet their social needs by communicating and interacting, but they may experience intense negative evaluation, ridicule and humiliation anxiety (Mehtalia and Vankar, 2004). Social anxiety is defined as the intense fear of embarrassment, humiliation, negative evaluation by others in the social environment, and the tendency to avoid these feared situations (American Psychiatric Association, 1994). Therefore, in parallel with the finding of this study, the social anxiety of adolescents who cannot receive peer support will tend to increase. According to Beck (2005), the individual may tend to avoid social environments with social anxiety. The possibility of rejection can be shown as the main reason underlying avoidance (Leary & Kowalski, 1995). Based on these statements, it can be said that social support has a very important place as a determinant of social anxiety in adolescence and is supported by the findings of this study. When the literature is examined, it is seen that the social anxiety of adolescents who do not receive adequate social support increases (Erath, Flanagan & Bierman, 2007; Calsyn, Winter & Burger, 2005). Adolescents who think that they are not supported by their social environment may tend to mask themselves by worrying about being negatively evaluated by their peers (Beck and Emery, 1985). Socially anxious individuals may tend to identify with other individuals in order to be approved by them, so they may remain reluctant to conform more to others, to reveal themselves less, and to present themselves (Patterson & Ritts, 1997). When the studies are examined, it is seen that there is a negative relationship between anxiety and autonomy (Lüle, 2002).

As a result of the study, it was seen that the perception of social self-efficacy, self-esteem and social anxiety were strong mediating variables in the relationship between the perceived peer support and autonomy of adolescents. Individual and group counseling can be carried out by psychological counselors by identifying adolescents with low self-esteem, social self-efficacy perception and high social anxiety, especially those who think that they do not receive peer support in schools.

The ability to determine the mediation effects of more than one mediator variable by making a multiple mediation model in the relationship between the predictor and outcome variables can be expressed as a strong aspect of this study. In addition, there are some limitations of the study. In this context, it was assumed that all participants responded to the measurement tools as mentally healthy. Another limitation is that the study group was selected from only one province. Therefore, care should be taken when generalizing the findings of the study to groups of similar age. It may be suggested to researchers who will conduct similar studies in the future to examine whether the same model produces a similar result on adolescents in different regions where cultural diversity is rich.

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