

Investigating the Relationship Between Bullying Coping Strategies and Cognitive Distortions in Adolescent

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Received: June 30, 2023

Accepted: August 23, 2023

Online Published: October 13, 2023

doi:10.5539/ies.v16n6p10

URL: <https://doi.org/10.5539/ies.v16n6p10>

Abstract

The purpose of this study is to examine the relationship between adolescents' use of cognitive distortions and their coping strategies for dealing with bullying. This research aims to contribute to the scientific understanding and resolution of bullying behaviors, which are frequently observed in schools and raise concerns among young people. Within the study, the relationships between cognitive distortions and the strategies used by adolescents to cope with peer bullying were examined descriptively. Convenient sampling method was used in the selection of the study group. The study group consists of 483 students studying in high schools in Erzurum city center. Bullying Coping Strategies Scale, Cognitive Distortions about Relationships Scale, and Personal Information Protocol were used as data collection tools. As a result of the study, significant results were found between the bullying coping strategies used by adolescents and their cognitive distortions. In addition, it was determined that cognitive distortions predicted coping strategies with bullying at a significant level.

Keywords: adolescent, bullying, cognitive distortions, coping strategies

1. Introduction

Adolescence is a period characterized by physical, sexual, moral, cognitive, and social changes, during which individuals adapt to these changes. During this time, the influence of peers on identity formation becomes stronger, making it a crucial stage of development. Adolescents aim to become more independent from their families and socialize with people outside of their family, which often leads to spending more time with peers. Schools are environments where adolescents spend a significant portion of their time. While schools have positive effects, such as increasing the number of friends and promoting socialization, they also come with new challenges. Negative experiences at school can lead to students feeling alienated from school and developing negative perceptions about it. Bullying is one of the negative situations encountered at school and can affect students both academically and socially.

Olweus (1978) initially defined school bullying as "violence shown by a group," but in 1999, he revised the definition to describe school bullying as "repeated negative behaviors by one or more students towards another student." This definition includes actions of "intentional harm" and "harassment." Besag (1995) described bullying as repeated psychological, physical, and social attacks by the powerful on those who do not have the power to resist, causing distress.

Research on peer relationships and aggression suggests that peer bullying has negative effects on adolescents' psychosocial adjustment, peer relationships, and school performance. Being repeatedly exposed to peer bullying can cause increasing harm in these areas over time (Burnukara, 2009). However, for adolescents to lead healthy lives, find their place in social settings, and develop a sense of competence, they need to effectively address their problems (Danışık, 2005).

Research on bullying has focused on students' levels of using bullying, their attitudes towards bullying, the relationship between exposure to bullying and psychological disorders, factors influencing bullying, the relationship between bullying and social skills, and the causes of bullying (Şahin & Sarı, 2010). In addition to these studies, bullying prevention efforts also focus on bullies themselves.

Cognitive distortions lead individuals to feel worthless, see their lives as meaningless, and consequently have dysfunctional emotions and thoughts (DiGiuseppe & Zee, 1986). Adolescents use both functional and dysfunctional coping strategies to deal with bullying; they can increase the negative effects of bullying by using dysfunctional coping strategies while using functional coping strategies can help reduce these negative effects. Victims who use dysfunctional coping strategies have a negative outlook on themselves, their surroundings, and their future. This is due to distorted thinking patterns in victims, and these distorted thinking patterns are referred to as “cognitive distortions.”

It is likely that victims who react passively when exposed to bullying have cognitive distortions. These victims may prefer to remain silent rather than seek help, believing that they deserve what they are going through and that they are not loved. Therefore, it is believed that the functionality of coping strategies used to deal with bullying may be related to cognitive distortions.

Understanding the strategies adolescents use to cope with bullying is important for preventing and reducing bullying in the school environment. While research on peer bullying examines various variables, studies on coping with bullying and preventing bullying are limited. When looking at studies on coping with bullying strategies, Salmivalli, Lagerspetz, Björkqvist, Österman, and Kaukiainen (1996); Furlong, Soliz, Simental, and Greif (2004); and Yöndem and Totan (2008) have noted that victims often use passive and avoidance strategies. In a study conducted by Leung and Poon (2001), there was a significant relationship between students’ aggression scores and cognitive distortions and dysfunctional beliefs. An investigation into the relationship between adolescents’ cognitive distortions and their bullying behaviors found a significant relationship between their dysfunctional beliefs and bullying (Şahin & Sarı, 2010).

This study aims to draw the attention of researchers to the relationships between adolescents’ strategies for coping with bullying and cognitive distortions and, in this context, to develop solutions. Furthermore, it is expected to contribute to the planning and implementation of preventive and remedial efforts against peer bullying and to increase awareness of the need to take necessary measures.

In this context, the study has sought answers to the following questions:

- 1) Do cognitive distortions predict adolescents’ coping strategies for bullying?
- 2) Do cognitive distortions, helplessness, and submission significantly predict bullying coping strategies?
- 3) Do cognitive distortions significantly predict help-seeking bullying coping strategies?
- 4) Do cognitive distortions significantly predict applying for social support bullying coping strategies?
- 5) Do cognitive distortions significantly predict avoidance bullying coping strategies?
- 6) Do cognitive distortions significantly predict bullying resistance and bullying coping strategies?
- 7) Do cognitive distortions significantly predict optimism bullying coping strategies?

2. Method

2.1 Research Model

In this study, a correlational survey model was used as the method to test whether there is a significant relationship between coping strategies for bullying and cognitive distortions in adolescents. The correlational survey model is a method used to reveal the relationship or effect between two different quantitative variables through a correlation coefficient (Frankel & Wallen, 2012).

2.2 Study Group

This study employed purposive sampling as the method for selecting the sampling unit when forming the study group. The purposive sampling technique involves selecting a similar subset of the population, focusing on a homogeneous subset of the population related to the research problem (Frankel & Wallen, 2012).

While forming the study group of this research, appropriate sampling methods were used to select the sampling unit. The purposive sampling technique involves sampling a homogeneous subset of the population related to the research problem, which is the selection of a similar subset in the universe (Frankel & Wallen, 2012).

Information about the study group is presented in Table 1 and Table 2.

Table 1. Distribution of students according to gender

Gender	Frequency	%
Girl	258	53.4
Male	225	46.6
Total	483	100.0

The study group for this study consisted of 483 students (258 females, 225 males, total 483) who were attending Vocational High School, Imam Hatip High School, Social Sciences High School, Science High School, and Anatolian High School in Erzurum province in the year 2014. They were included in the study through an appropriate sampling method in the 2015 academic year. It is observed that approximately 53% of the students participating in the research were female, while 47% were male.

Table 2. Distribution of students by school type

	Frequency	%
Science High School	110	22.8
Social Sciences HighSchool	77	15.9
Anatolian High School	125	25.9
Vocational High School	103	21.3
Imam Hatip High School	68	14.1
Total	483	100.0

When examining the distribution of students by school types, it is observed that approximately 23% were from science high schools, 16% from social sciences high schools, 26% from Anatolian high schools, 20% from vocational high schools, and 14% from imam hatip high schools.

2.3 Measurement Tools

2.3.1 Cognitive Distortions about Relationships Scale

The scale, developed by Hamamcı in 2002, aims to determine cognitive distortions in interpersonal relationships. It consists of 19 items and uses a 5-point Likert-type scale ranging from “strongly disagree” to “strongly agree.” It includes 3 subscales: unrealistic relationship expectations (items 5, 9, 11, 14, 15, 16, 17, 18), intimacy avoidance (items 1, 2, 3, 4, 10, 12, 13, 19), and mind-reading (items 6, 7, 8). The reliability of the scale was calculated using the test-retest and internal consistency methods. The internal consistency coefficient of the scale is 0.67. The test-retest correlation coefficient for the entire scale is 0.74 (Hamamcı & Büyüköztürk, 2003).

2.3.2 Bullying Coping Strategies Scale

Developed by Seçer in 2014, the scale aims to determine the coping strategies used by secondary and high school students when they are exposed to bullying. The scale consists of 27 items and includes five subscales: seeking help, helplessness and submission, seeking social support, avoidance, resistance to bullying, and optimism. It is a 4-point Likert-type scale ranging from “never” to “always.” The internal consistency coefficient of the scale is 0.84, the split-half reliability for the entire scale is 0.83, and the test-retest correlation coefficient for the entire scale is 0.86 (Seçer, 2014).

2.4 Research Process

The scales were administered to high school students selected through the convenient sampling method for the research sample. The principle of voluntariness was adopted in scale application, aiming to encourage honest responses as much as possible. In addition, the principle of confidentiality was adhered to prevent the sharing of scale results with others, and trust was established by explaining their use in the research. The application period lasted approximately 30 minutes. Necessary permissions were obtained from the ethics committee for the administration of the scales.

2.5 Data Analysis

In the study, Pearson correlation analysis was used to examine the relationship between cognitive distortions and coping strategies for dealing with bullying, and multiple regression analysis was used to investigate whether cognitive distortions predict coping strategies for dealing with bullying.

Pearson correlation analysis examines the relationship between two continuous variables, while multiple

regression analysis is used to explain this relationship with a mathematical equation, where at least one of the three related variables determined as predictor variables is specified, and at least two of them are specified as predictor variables (Seçer, 2013).

To determine the suitability of the data for normal distribution, Mahalanobis distance values, which should be examined to check whether the assumptions of multivariate normality are met, were investigated. As a result, it was determined that data from 2 students had outliers and were removed from the dataset. Furthermore, kurtosis and skewness values were examined to assess the conformity of the data to the conditions of multiple linear regression analysis.

3. Findings

3.1 Findings on the Relationship Between Bullying Coping Strategies and Cognitive Distortions

“Pearson correlation analysis” results for subscale of the cognitive distortions and bullying coping strategies scale are presented in Table 3.

Table 3. Correlation analysis between cognitive distortions and bullying coping strategies

		Helplessness and submission	Help-seeking	Applying for social support	Avoidance	Bullying resistance	Optimism	Bullying Total
Intimacy avoidance	<i>R</i>	.139*	.052	.069	.116*	-.001	.146*	.137*
	<i>p</i>	.002	.258	.133	.010	.989	.001	.003
Unrealistic relationship expectations	<i>R</i>	.084	.122*	.232*	.088	.006	.089	.206*
	<i>p</i>	.065	.007	.000	.054	.896	.051	.000
Mind reading	<i>R</i>	-.089*	.139*	.163*	.029	.225*	-.005	.190*
	<i>p</i>	.050	.002	.000	.529	.000	.904	.000
Total	<i>R</i>	.104*	.136*	.216*	.124*	.061	.133*	.246*
	<i>p</i>	.022	.003	.000	.006	.180	.003	.000

Note. * $p < .05$.

According to the results of the analysis conducted to determine the significant relationships between cognitive distortions and bullying coping strategies, it was determined that the total scores of cognitive distortion and bullying scales showed a significant positive correlation.

It was determined that there was a significant relationship between the intimacy avoidance subscale of cognitive distortions with adolescents' coping strategies of helplessness and submission, avoidance, and optimism and that this relationship was positive. On the other hand, no significant relationship was found between the intimacy avoidance subscale of cognitive distortions and the strategies of seeking social support, seeking help, and resisting bullying.

While there was a significant positive correlation between the unrealistic relationship expectation subscale of cognitive distortions with the help-seeking and seeking social support strategies of the coping strategies used by adolescents, there was no significant correlation between helplessness and submission, avoidance, resisting bullying, and optimism.

There is a significant positive relationship between the mind-reading subscale of cognitive distortions with the subscales of help-seeking, applying for social support, and bullying resistance of the coping strategies used by adolescents; there is a significant negative relationship between the subscales of helplessness and submission, and there is no significant relationship between the subscales of avoidance and optimism.

3.2 Findings on Variables Predicting Coping Strategies for Bullying

Stepwise multiple regression analysis was applied to examine the predictive status of cognitive distortions on helplessness and submission strategy of the bullying coping strategies scale.

Table 4. Results of stepwise multiple regression analysis for cognitive distortions and helplessness and submission bullying coping strategy

Model	Predictor Variables	B	Standard Error	β	t	p
1.	Fixed	1.79	.33		5.29	.00*
	Intimacy avoidance	.04	.01	.13	3.07	.02*
2.	Fixed	2.44	.41		5.86	.00*
	Intimacy avoidance	.05	.01	.16	5.29	.00*
	Mind reading	-.08	.03	-.12	-2.64	.08*

Note. a. Dependent Variable: Helplessness and submission; * $p < .05$ (1st Model: $R^2 = .019$, $F_{(1-481)} = 9.424$, 2nd Model: $R^2 = .033$, $F_{(2-480)} = 8.277$)

When Table 4 is examined, it is observed that only intimacy avoidance and mind-reading subscales of the cognitive distortions scale related to relationships significantly predicted the helplessness and submission subscale of coping strategies used by adolescents. According to the results of this analysis, it can be said that intimacy avoidance explained 1.9% of helplessness and submission behavior in the first stage, and mind reading explained 1.4% of helplessness and submission strategy in the second stage.

To determine whether cognitive distortions predict the help-seeking strategy of the bullying coping strategies scale, “stepwise multiple regression analysis” was applied. The findings are given in Table 5.

Table 5. Results of stepwise multiple regression analysis for cognitive distortions and help-seeking bullying coping strategy

Model	Predictor Variables	B	Standard Error	β	t	p
1.	Fixed	2.70	.65		4.11	.00*
	Mind reading	.20	.06	.13	3.08	.00*
2.	Fixed	1.41	.88		1.60	.11
	Mind reading	.18	.06	.12	2.63	.00*
	Unrealistic relationship expectations	.06	.03	.10	2.18	.02*

Note. a. Dependent Variable: Help-seeking; * $p < .05$ (1st Model: $R^2 = .019$, $F_{(1-481)} = 9.503$, 2nd Model: $R^2 = .029$, $F_{(2-480)} = 7.173$)

When examining Table 5, it becomes evident that among the cognitive distortions scale dimensions related to relationships, only unrealistic relationship expectancy and mind-reading significantly predicted the help-seeking strategy employed by adolescents as part of their coping strategies. In light of these findings, it is noteworthy that mind-reading accounted for 1.9% of the variance in the help-seeking strategy during the initial stage, while unrealistic relationship expectancy contributed to 1% of the variance in the help-seeking strategy during the subsequent stage.

A stepwise multiple regression analysis was applied to determine whether cognitive distortions predicted the strategy of applying for social support, one of the strategies for coping with bullying.

Table 6. Results of stepwise multiple regression analysis for cognitive distortions and applying for social support bullying coping strategy

Model	Predictor Variables	B	Standard Error	β	t	p
1.	Fixed	4.31	.81		5.27	.00*
	Unrealistic Relationship expectation	.17	.03	.23	5.22	.00*
	Fixed	2.72	.99		2.73	.00*
2.	Unrealistic Relationship expectation	.15	.03	.20	4.66	.00*
	Mind reading	.21	.07	.12	2.78	.00*

Note. a. Dependent Variable: resorting to social support; *p <.05 (1st Model: $R^2 = .054$, $F_{(1-481)} = 27.32$, 2nd Model: $R^2 = .069$, $F_{(2-480)} = 17.73$)

When Table 6 is examined, it is seen that unrealistic relationship expectation and mind-reading cognitive distortions significantly predict the subscale of applying for social support in the coping strategies used by adolescents. According to the results of this analysis, it is seen that unrealistic relationship expectation explains 5.4% of the behavior of applying for social support in the first stage, and mind reading explains 1.5% of the behavior of applying for social support in the second stage.

A stepwise multiple regression analysis was conducted to predict cognitive distortions on the avoidance of the bullying coping strategies scale. The findings are presented in Table 7.

Table 7. Results of stepwise multiple regression analysis for cognitive distortions and avoidance bullying coping strategy

Mode l	Predictor Variables	B	Standard Error	β	t	p
1.	Fixed	.77	.36		2.15	.03*
	Intimacy avoidance	.04	.01	.11	2.57	.01*

Note. a. Dependent Variable: Avoidance; *p <.05(1st Model: $R^2 = .014$, $F_{(1-481)} = 6.612$)

When Table 7 is examined, it is observed that only the intimacy avoidance dimension of the scale of cognitive distortions related to relationships significantly predicted the avoidance subscale of the coping strategies used by adolescents. According to these analysis results, it can be said that intimacy avoidance explains 1.4% of the avoidance strategy in coping with bullying.

A stepwise multiple regression analysis was conducted to determine whether cognitive distortions predicted the bullying resistance of the bullying coping strategies scale. The results are given in Table 8.

Table 8. Results of stepwise multiple regression analysis for cognitive distortions and bullying resistance bullying coping strategy

Mode l	Predictor Variables	B	Standard Error	β	t	p
1.	Fixed	7.16	.59		11.98	.00*
	Mind reading	.30	.06	.22	5.06	.00*

Note. a. Dependent Variable: Resistance to bullying; *p <.05 (1st Model: $R^2 = .051$, $F_{(1-481)} = 25.66$)

When Table 8 is examined, it was found that the coping strategies used by adolescents significantly predicted the subscale of bullying resistance and only the mind reading dimension of the cognitive distortions about relationships scale. According to the stepwise multiple regression analysis results, mind reading explained 5.1% of the bullying resistance behavior.

A stepwise multiple regression analysis was applied to determine whether cognitive distortions predicted the optimism of the bullying coping strategies scale. The findings are shown in Table 9.

Table 9. Results of stepwise multiple regression analysis for cognitive distortions and optimism bullying coping strategy

Model	Predictor Variables	B	Standard Error	β	t	p
1.	Fixed	1.96	.48		4.04	.00*
	Intimacy avoidance	.06	.02	.14	3.24	.00*

Note. a. Dependent Variable: optimism; * $p < .05$ (1st Model: $R^2 = .021$, $F_{(1,481)} = 10.505$)

When Table 9 is examined, only the avoidance of the closeness dimension of the scale of cognitive distortions related to relationships significantly predicts the optimism subscale of the coping strategies used by adolescents. According to these analysis results, it can be said that intimacy avoidance explains 2.1% of the optimism strategy.

4. Conclusion

This study aimed to explore the association between adolescents' coping strategies for dealing with peer bullying and cognitive distortions, along with the predictive role of cognitive distortions in coping strategies related to bullying. The analysis revealed a positive and significant correlation between the total scores of cognitive distortions and those of coping strategies for dealing with bullying.

In a study by Kurnaz (2009) on the relationship between aggression and peer bullying, it was concluded that cognitive distortions had a significant association with relational aggression and served as a noteworthy predictor for such aggression. Likewise, Kılıçarslan (2009) investigated the connection between irrational beliefs and aggression and discovered a significant relationship, mirroring the findings of this study. A review of relevant literature underscores that studies examining the interplay between coping strategies and cognitive distortions consistently yield significant results. Şahin and Sarı (2010), in their examination of the relationship between bullying, cognitive distortions, and dysfunctional beliefs, identified a substantial link between dysfunctional beliefs among adolescents and their tendency towards bullying. Furthermore, research conducted by Leung and Poon (2001) supported the existence of a significant relationship between the emotional and behavioral problems of young people and their cognitive distortions. In a similar vein, Capuano (2007) investigated the association between empathic skills, cognitive distortions, and aggression in young individuals, uncovering a notable differentiation between aggression and empathy, as well as cognitive distortions.

Based on the study findings, it can be inferred that adolescents employing helplessness and submission as coping strategies against bullying tend to exhibit intimacy avoidance and mind-reading cognitive distortions. A previous study by Ağır (2007) highlighted that cognitive distortions characterized by negative self-image, self-blame, helplessness, hopelessness, and a perception of life as inherently perilous can erode one's self-confidence in problem-solving. Cash (1984) also noted that individuals harboring irrational beliefs often manifest an external locus of control, coupled with deficient social skills, heightened anxiety, an aversion to problem-solving, a prevailing sense of helplessness, dependency on others, and a craving for approval. The desire for acceptance, love, and recognition in interpersonal relationships may compel individuals to engage in behaviors incongruent with their true selves. Consequently, the pursuit of social acceptance can lead individuals to forsake their authentic selves and become excessively reliant on external validation (Atıcı, 2011).

Adolescents exhibiting the cognitive distortion of mind-reading, wherein they tend to interpret others' thoughts baselessly or assume motives without concrete evidence, tend to employ various coping strategies, including seeking help, seeking social support, resisting bullying, as well as adopting helplessness and submission strategies. Among adolescents characterized by this cognitive distortion, those who resort to the helplessness and submission strategy, an ineffective coping approach, may believe that they will not receive assistance, that others hold unfavorable feelings about them, that they are not loved, and that they are powerless to thwart the bully's actions.

The study results suggest that adolescents who employ the help-seeking strategy to contend with bullying tend to exhibit unrealistic relationship expectations and mind-reading cognitive distortions. A review of various studies on help-seeking reveals that it is considered one of the coping strategies (Rickwood, Deane, Wilson, & Ciarrochi, 2005) wherein individuals leverage their social surroundings and interpersonal relationships to address their challenges. Del Mauro and Williams (2013) highlight that adolescents often grapple with concerns about stigmatization, which can adversely affect their inclination to seek help. The finding that adolescents devoid of proximity avoidance cognitive distortions tend to resort to the help-seeking bullying coping strategy lends further credence to this research.

According to the results of the study, we can say that adolescents who use the strategy of applying for social support to cope with bullying have unrealistic relationship expectations and mind-reading cognitive distortions.

Clanton, Rude, and Taylor (1992) stated that individuals with positive automatic thoughts cope with challenging situations more constructively. Sinha and Nayyar (2002) stated that they show a positive attitude towards life with the social support they receive. Adolescents who use unrealistic relationship expectation, which leads to high expectations from themselves and other people in their relationships, use the coping strategy of help-seeking and applying for social support. The highest value among all regressions was between this cognitive distortion and the strategy of seeking social support. Adolescents who use this cognitive distortion, which leads to beliefs such as “everyone should love me and help me,” do not hesitate to apply for social support and may attempt to seek help because their beliefs that others should help them when bullied will be very strong. We can say that adolescents who use the cognitive distortion of unrealistic relationship expectation use effective coping strategies.

According to the study results, we can say that adolescents who use the avoidance bullying coping strategy have the cognitive distortions of intimacy avoidance. Clark and Mcmanus (2002) argued that social anxiety is fed by a cycle of cognitive processes that impair social performance. Social avoidance leads to negative social consequences, negatively affecting psychosocial development, and thus, this negative process perpetuates itself (Banerjee & Henderson, 2001). It can be thought that the main reason for intimacy avoidance is the fear of being evaluated negatively, which is also the cause of social anxiety. Whisman and Friedman (1998) examined the relationship between dysfunctional attitudes and problematic interpersonal behaviors. They concluded that uncontrolled behaviors lead to problems in interpersonal relationships, such as insensitivity, anger, suspicion, difficulty in experiences, inability to express feelings to others, and social anxiety. These negativities cause the individual to behave in a problematic way and avoid other individuals.

Considering that adolescents who use the cognitive distortion of intimacy avoidance use coping strategies of helplessness and submission, avoidance, and optimism, we can say that these adolescents mostly use ineffective coping methods. Notably, adolescents who use this cognitive distortion, which predicts that intimate relationships will have negative consequences and, therefore, intimacy should be avoided, also use the avoidance strategy in their coping methods. Since this cognitive distortion leads to erroneous inferences that prevent adolescents from making friends and acquiring a social environment, the individual may become lonely and experience feelings of inadequacy as a result. Likewise, when bullied, they may think there is no one they can get help from and try to avoid such environments. This adolescent who avoids intimacy may also develop beliefs that no matter what they do, they cannot change the outcome and that they deserve to be bullied.

According to the research results, we can say that adolescents who use the bullying coping strategy of bullying resistance have mind-reading cognitive distortions. Adıgüzel (2016) stated that there was no relationship between “helplessness - submission” and “bullying resistance,” which are coping strategies used by high school students, and self-actualization, emotional stability, psychotic symptoms, and neurotic tendencies, which are personal adjustment and its subscales.

Based on the study’s findings, it is apparent that adolescents employing the optimism bullying coping strategy tend to exhibit avoidance of closeness. Optimism denotes a disposition to perceive positive outcomes more readily than negative ones and to anticipate encountering favorable events (Harris & Middleton, 1994). In his research, Adıgüzel (2016) concluded that there was no significant correlation between optimism, considered a functional strategy within coping strategies for dealing with bullying, and emotional stability, psychotic symptoms, neurotic tendencies, or personal adjustment. Notably, the study conducted by Peker and Gültekin (2014), which highlighted the favorable communication skills and interpersonal relationships of those adopting an optimistic approach to cope with bullying, does not entirely align with the findings of this study. Similarly, Chang (1998) identified an inverse relationship between optimism and the utilization of other avoidance strategies.

Sullivan and Schwebel (1996) evaluated young adults’ positive beliefs and negative beliefs about relationships. They stated that some cognitions are unrealistic in contrast to beliefs that contribute positively to the relationship and reflect reality. They stated that some individuals had unrealistically optimistic expectations in their relationships. These beliefs may cause individuals to experience problems in their relationships and be disappointed, and as a result, they may experience conflicts in interpersonal relationships and avoid establishing intimacy.

In line with the findings obtained as a result of this study, recommendations for researchers and practitioners for future research and prevention studies on the relationship between the strategies adolescents use to cope with peer bullying and cognitive are given below: Considering that bullying is an important problem for all developmental periods, conducting research that will include other school levels, when the studies on coping strategies with peer bullying are examined, scientific accumulation in this direction is limited, so studies on various variables and strategies for coping with bullying, taking into account the cognitive distortions of students in the intervention

programs to be developed to prevent bullying.

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Authors contributions

Both authors contributed equally to the study. All authors read and approved the final manuscript.

Competing interests

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.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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