

The Relationship Between Family Functioning and Social Anxiety: The Mediating Role of Problem-solving Coping Among Adolescents Experiencing Peer Victimization

Denise Permatasari^{1*}

¹ Universitas Muhammadiyah Malang, Indonesia

*Corresponding author: denise_permatasari@yahoo.com

Abstract: Adolescents who experience peer victimization are often associated with elevated levels of social anxiety. Family functioning has been identified as an important antecedent that may influence the development of social anxiety, while coping strategies may play a mediating role in this relationship. This study aims to examine the relationship between family functioning and social anxiety, with problem-solving coping as a mediator. The participants consisted of 148 adolescents aged 13–16 years who had experienced peer victimization. Data were collected using the Social Anxiety Scale for Adolescents (SAS-A), the Family Assessment Device (FAD), and the Coping Strategy Indicator (CSI). Data analysis was conducted using the PROCESS macro to test the proposed mediation model. The results revealed a significant negative relationship between family functioning and social anxiety ($\beta = -0.63$; $p < 0.01$), indicating that better family functioning is associated with lower levels of social anxiety. Furthermore, problem-solving coping was found to significantly mediate this relationship ($\beta = 0.04$; $Z = 1.98$; $p < 0.05$). These findings suggest that effective family functioning contributes to the development of adaptive coping strategies, which in turn reduce social anxiety among adolescents. The study highlights the importance of family dynamics and coping mechanisms in addressing social anxiety, particularly among adolescents exposed to peer victimization.

Keywords: Family dynamics, anxiety disorders, coping mechanisms, bullying victims, and adolescent development.

1 Introduction

Social anxiety among adolescents is not a new phenomenon; however, it remains relatively underexplored, resulting in limited public awareness of its symptoms and consequences, particularly in social contexts. Data from the Anxiety and Depression Association of America indicate that social anxiety affects approximately 6.8% of the population in the United States (Skarl, 2015). In contrast, in Indonesia, around 15.8% of individuals experience high levels of social anxiety, placing the country among those with comparatively higher prevalence rates than other regions in Asia and Western countries (Vriends et al., 2013). This condition affects both males and females and typically emerges during early adolescence, with an average onset at approximately 13 years of age.

Social anxiety is characterized by discomfort in social interactions, persistent worry, and excessive fear of negative evaluation or humiliation. Adolescents with social anxiety often experience heightened anxiety when speaking in public, becoming the center of attention, or interacting with unfamiliar individuals. They also

tend to fear embarrassment and frequently avoid new or challenging social situations (Hofmann & Dibartolo, 2014). If left unaddressed, social anxiety may lead to a range of adverse outcomes, including poor academic performance and school failure, substance abuse (Pagano et al., 2015), depression and loneliness (Cavanaugh & Buehler, 2015), low self-esteem (Şahin et al., 2014), social withdrawal (Dempsey & Storch, 2008; Reijntjes et al., 2010), and increased shyness (Hofmann & Dibartolo, 2014).

The development of social anxiety in adolescents is influenced by multiple factors, including deficits in social skills (Angelico et al., 2013), exposure to stressful life events, and negative interpersonal experiences such as abuse, neglect, harassment, and peer victimization (Nishina & Juvonen, 2005). Among these factors, peer bullying has been identified as a significant predictor of social anxiety (Gren-Landell et al., 2011). Bullying is prevalent from elementary through high school, with approximately 32% of children and adolescents worldwide reported as victims (You & Yoon, 2016). Relational bullying, such as social exclusion, is the most common form and has been shown to contribute to persistent social anxiety (Siegel et al., 2009). Furthermore, gender differ-

ences have been observed, where males are more likely to experience physical bullying, while females are more often exposed to relational bullying, both of which are associated with elevated levels of social anxiety (Vuijk et al., 2007).

During adolescence, peer relationships become increasingly salient and play a central role in development. Adolescents spend more time with peers than with family members, and peers serve as a primary source of emotional support, shaping self-concept and overall well-being (Furman et al., 2008). However, adolescents with high social anxiety often experience impaired social functioning, including difficulties in forming friendships, low social acceptance, and limited peer support (La Greca & Lopez, 1998). This condition may hinder their ability to seek support from others, including family members.

In addition to peer influences, family factors also contribute to the development of social anxiety. Family functioning variables such as family conflict, parental marital discord, authoritarian and pessimistic parenting styles, and sibling relationships have been associated with increased anxiety in adolescents (Bowes et al., 2014; Yousaf, 2015). Dysfunctional family environments may exacerbate psychological problems and increase the likelihood of maladaptive behaviors. Moreover, children with a genetic predisposition to anxiety who are raised in environments characterized by ineffective parenting are at greater risk of developing anxiety disorders. Sibling relationship problems, including conflict and jealousy, have also been linked to elevated anxiety levels, particularly when children perceive unequal parental treatment (Drake & Ginsburg, 2012; Lindhout et al., 2009).

Coping strategies play a crucial role in mitigating social anxiety among adolescents. The use of appropriate coping mechanisms can reduce psychological distress associated with social challenges (Kochenderfer-Ladd, 2004). Problem-focused or rational coping, in particular, has been associated with better social skills and more effective problem-solving abilities, enabling adolescents to manage challenging social situations more adaptively (Lee et al., 2016; Palmer & Rodger, 2009). In daily contexts such as school, where adolescents frequently encounter stressors including bullying, academic demands, and interpersonal conflicts, coping strategies significantly influence their level of social anxiety (Markova & Nikitskaya, 2014). Family functioning also contributes to shaping adolescents' coping strategies, as effective family environments provide guidance, emotional support, and problem-solving models (Crosswhite & Kerpleman, 2009).

Despite the established roles of family functioning and coping strategies, empirical findings remain inconsistent. For instance, Ghamari (2012) reported no sig-

nificant relationship between family dysfunction and social anxiety, suggesting that family influence may diminish during adolescence. In contrast, (McGinn et al., 2010) found that dysfunctional family patterns are closely associated with various psychological problems, including anxiety, depression, sleep disturbances, and impaired social functioning. Given these inconsistencies, further investigation is needed to clarify the mechanisms underlying social anxiety in adolescents. In particular, examining coping strategies as a potential mediating variable may provide a more comprehensive understanding of how family functioning influences social anxiety. Therefore, this study aims to examine the relationship between family functioning and social anxiety in adolescents, with coping strategies as an intervening variable.

Despite the growing recognition of social anxiety among adolescents, its underlying mechanisms remain insufficiently understood, particularly in relation to family dynamics and individual coping processes. Previous studies have highlighted the significant role of peer experiences, such as bullying, in the development of social anxiety; however, the influence of family functioning has produced inconsistent findings. Some studies suggest that dysfunctional family environments contribute to higher levels of adolescent anxiety, while others indicate that family influence may diminish during adolescence, leading to non-significant associations.

In addition, coping strategies have been identified as an important factor in managing psychological distress, including social anxiety. Effective coping, particularly problem-focused coping, is believed to facilitate better psychosocial adjustment. Nevertheless, limited research has examined the integrative role of coping strategies in explaining how family functioning may influence social anxiety among adolescents. This gap is particularly evident in the Indonesian context, where the prevalence of social anxiety is relatively high but empirical investigations remain limited.

Therefore, it is necessary to further investigate the relationship between family functioning and social anxiety, as well as to examine the potential mediating role of coping strategies. By addressing these gaps, this study seeks to provide a more comprehensive understanding of the factors contributing to social anxiety in adolescents.

2 Literature Review

According to Bronfenbrenner's ecological systems theory, the family constitutes a central component of the microsystem, representing the closest, most enduring, and most influential context in an individual's life. The family system encompasses relationships among spouses, parents, and siblings, characterized by strong emotional bonds and functional interdependence. Within this mi-

ecosystem, family interactions shape various aspects of adolescent development through continuous feedback processes, resulting in observable behavioral patterns (Bronfenbrenner, 1977). Consequently, adolescents' social anxiety may be influenced by family dynamics, given the family's critical role in socioemotional development. Families that effectively manage and resolve internal conflicts are better able to adapt to challenges, whereas unresolved problems may lead to prolonged dysfunction and psychological distress.

This study is also grounded in Bowen's family systems theory, which conceptualizes the family as an emotional unit. From a systems perspective, family members are interconnected and interdependent, such that each individual's thoughts, emotions, and behaviors influence those of others (Priest, 2015). Within this framework, maladaptive patterns of anxiety regulation in children are often rooted in family experiences. Exposure to negative family environments, including conflict and adverse events, may contribute to the development of social anxiety, as children tend to model parental responses to stress and adversity (Peleg-Popko, 2002).

The family plays a fundamental role in shaping children's emotional development and personality. Family functioning refers to patterns of interaction that enable families to operate effectively in achieving shared goals. In contrast, family dysfunction reflects maladaptive interaction patterns that exacerbate stress and contribute to behavioral and psychological problems. Empirical evidence suggests that dysfunctional family environments are associated with higher levels of anxiety among adolescents (Drake & Ginsburg, 2012). Although well-functioning families are not free from stress or conflict, they are generally more capable of managing challenges, fulfilling roles, and meeting the needs of their members. Clear role distribution, effective communication, and timely conflict resolution are key characteristics of functional families that can mitigate psychological problems in adolescents (Ghamari, 2012).

Previous research has identified several family-related factors associated with social anxiety in children and adolescents, including parental anxiety, exposure to stressful events, poor family relationships, intra-family conflict, and unmet emotional needs. Parenting practices, in particular, are significant predictors of anxiety. Parents who fail to provide adequate emotional support during stressful situations may inadvertently contribute to feelings of neglect and heightened anxiety in their children (Bögels & Brechman-Toussaint, 2006).

2.1 The Relationship between Family Functioning and Coping Strategies

Effective family functioning promotes positive communication, emotional bonding, mutual respect, and supportive relationships among family members. It also facilitates role fulfillment, problem-solving, and appropri-

ate autonomy while maintaining necessary behavioral control. Empirical findings indicate a significant relationship between family functioning and coping strategies, particularly support-seeking coping (Crowe & Lyness, 2014). In well-functioning families, individuals are more likely to seek and receive emotional and instrumental support when facing difficulties.

Problem-solving processes within the family are closely linked to the development of coping strategies. Children's coping patterns are often shaped by parental models and tend to remain relatively stable over time. Through observational learning, children adopt the coping strategies commonly employed by their parents when dealing with stress and challenges (Pollard & Kennedy, 2007).

2.2 The Relationship between Coping Strategies and Social Anxiety

Coping strategies play a significant role in adolescents' emotional responses to social stressors. Emotion-focused coping is more commonly observed among children and adolescents, particularly in response to peer-related stress. For example, adolescents who experience peer exclusion tend to exhibit anger and engage in aggressive coping behaviors (Goodman & Southam-Gerow, 2010). Similarly, victims of bullying often report heightened negative emotions, such as anxiety, fear, and worry, and are more likely to rely on emotion-focused coping strategies. In contrast, different emotional responses may lead to distinct coping behaviors; anxiety and fear may prompt support-seeking, whereas anger and shame may result in retaliatory or maladaptive coping (Kochenderfer-Ladd & Skinner, 2002).

Problem-focused coping, or rational coping, is generally considered more adaptive, as it is associated with better psychosocial adjustment (Palmer & Rodger, 2009). The type of coping strategy employed can either exacerbate or alleviate social anxiety. Empirical evidence indicates that problem-focused coping is linked to positive adjustment outcomes, whereas emotion-focused coping is often associated with negative psychological outcomes, including increased anxiety and depression (Lee et al., 2016; Pollard & Kennedy, 2007).

2.3 The Mediating Effect of Coping Strategies

As the primary context of adolescent development, the family exerts a strong influence on psychosocial outcomes. Dysfunctional family environments are associated with increased emotional distress, including anxiety (Wang et al., 2016). Such dysfunction may arise from unclear roles, ineffective communication, or rigid relational patterns, which can hinder adaptive functioning. Adolescents raised in these environments are more likely to experience emotional and behavioral problems, including social anxiety.

Conversely, families with healthy functioning pro-

vide effective role modeling, emotional support, and problem-solving guidance. Parents in such families demonstrate adaptive coping strategies and foster open communication, enabling adolescents to develop effective coping mechanisms (Angley et al., 2014). Adolescents who utilize support-seeking coping—drawing on parents, siblings, teachers, and peers—tend to experience reduced anxiety and loneliness (Cavanaugh & Buehler, 2015).

Both family functioning and coping strategies have been shown to predict psychological outcomes, including anxiety, depression, and mood disturbances (Barbarin et al., 1999). Within this framework, coping strategies may function as a mediating variable in the relationship between family functioning and social anxiety. Specifically, aspects of family functioning—such as parent–child relationships, role clarity, problem-solving processes, and behavioral regulation—can shape adolescents' coping strategies, which in turn influence their levels of anxiety.

2.4 Hypothesis

Hypothesis 1: There is a negative and significant relationship between family functioning and social anxiety.

Hypothesis 2: There is a positive and significant relationship between family functioning and problem-focused coping.

Hypothesis 3: There is a negative and significant relationship between problem-focused coping and social anxiety.

Hypothesis 4: Problem-focused coping mediates the relationship between family functioning and social anxiety.

3 Research Methods

3.1 Research Design

This research design was conducted using an ex post facto one-shot design. This research design was chosen because the study did not provide treatment to the sample due to the data already available. The design used a quantitative inferential research approach using regression techniques. Regression techniques were used to prove the hypothesized relationship between variables and the mediation value (Creswell, 2014).

3.2 Subjects

The population in this study consisted of adolescents aged 13-16 who were victims of peer bullying. The sample in this study was based on population characteristics with a total of 148 subjects. This study used a purposive sampling technique as a consideration (Creswell, 2014). The study was conducted at Kartika IV-8 Middle School, Kartika IV-9 Middle School, Shalahuddin

Middle School, Muhammadiyah 1 Middle School, and Taman Dewasa Middle School in Malang City. The characteristics of the research subjects can be seen in Table 1.

3.3 Instrument

3.3.1 Experience Peer Bullying

Peer bullying experiences were measured using a questionnaire designed to assess the subjects' experiences of bullying by their peers. The questionnaire was structured based on the forms of peer bullying: overt (physical and verbal threats), relational (exclusion), and reputational (spreading rumors or damaging relationships with peers). It consisted of seven items. An example item was: "How often do friends yell at me or curse at me?" Response options included "never," "rarely," "often," and "always."

3.3.2 Social Anxiety Scale for Adolescents

Social anxiety was measured based on adolescents' subjective experiences using the Social Anxiety Scale for Adolescents (SAS-A; La Greca and Lopez, 1998). The SAS-A was designed to examine the relationship between adolescents' social anxiety and peers, friendships, and social functioning. The SAS-A is a self-report questionnaire using a Likert scale format ranging from 1 (strongly disagree) to 4 (strongly agree). The SAS-A consists of 18 items with 3 subscales, namely Fear of Negative Evaluation (FNE) with 8 items reflecting feelings of fear, worry, or anxiety being assessed negatively, Social Avoidance and Distress in New Situations (SAD-N) with 6 items reflecting social avoidance and difficulty

Table 1: Description of Research Subjects (N=148)

Description	Number	Percentage
School		
Kartika IV-8 JHS	51	34.5
Kartika IV-9 JHS	23	15.5
Shalahuddin JHS	22	14.8
Muhammadiyah 1 JHS	26	17.6
Taman Dewasa JHS	26	17.6
Gender		
Male	81	54.7
Female	67	45.3
Old		
13 years	39	26.3
14 years	80	54.1
15 years	27	18.2
16 years	2	1.4
Siblings		
Has siblings	137	92.6
Single	11	7.4

facing new social situations or unfamiliar peers. Social Avoidance and Distress General (SAD-G) with 4 items reflecting social pressure, feelings of discomfort, and inhibition. Example item: "It is very difficult for me to ask other people to do things with me." A high overall score on the SAS-A scale indicates a high level of social anxiety. The SAS-A has internal consistency with a Cronbach's alpha coefficient of 0.87.

3.3.3 Family Assessment Device

Family functioning was measured using the Family Assessment Device (FAD; Epstein et al., 1983). The FAD was designed to describe the structure and organization of family groups and the patterns used among family members so that it can distinguish between fully functioning and dysfunctional families. The FAD is a self-report questionnaire using a Likert scale format from 1 (strongly disagree) to 4 (strongly agree). The FAD consists of 53 items with 7 subscales: Problem Solving (5 items), which refers to the family's ability to resolve a problem to maintain effective family function. Communication (6 items), which reflects the exchange of information between family members. Roles (8 items), which reflect the role of individual behavioral patterns when completing tasks or functions within the family. Affective Responsive (6 items), which assesses the family's ability to respond to emotional stimuli. Affective Involvement (7 items), which relates to the extent to which family members are interested in and place value on each other's activities and concerns. Behavior Control (9 items), which reflects how the family expresses and maintains standards of behavior among family members. The 12-item General Functioning scale assesses the overall health or pathology of a family. Example item: "We are able to express our feelings to each other." A high overall score on the FAD scale indicates a high level of family functioning. The FAD has internal consistency with a Cronbach's alpha coefficient of 0.89.

3.3.4 Coping Strategy Indicator

Problem-solving coping was measured using the Coping Strategy Indicator (CSI; Amirkhan, 1990). The CSI is designed to determine the tendency of coping strategies used. The CSI consists of 33 items across three dimensions: 11 items for Problem Solving, with an example item: "Setting multiple goals for myself when facing certain situations." 11 items for Seeking Support, with an example item: "Talking to a specific person about the situation I'm facing makes me feel better." 11 items for Avoidance, with an example item: "Spending time doing hobbies or sports to avoid problems." The CSI is a self-report questionnaire using a Likert scale format modified from a multidimensional to a unidimensional scale. In this case, the Problem Solving and Seeking Support dimensions were scored from 1 (strongly disagree) to 4 (strongly agree), and the Avoidance dimen-

sion was scored from 1 (strongly agree) to 4 (strongly disagree). High scores indicate a tendency for subjects to use problem-solving coping. The CSI has internal consistency with a Cronbach's alpha coefficient of 0.84.

3.4 Research Procedure

This study began with a preparatory stage: preparing an instrument to measure experiences of peer bullying, family functioning, social anxiety, and problem-solving coping in the form of a questionnaire. Then, observations of the research site and consultations with the principal, curriculum coordinator, and guidance counselor were conducted. Researchers piloted the instrument to measure reliability. Then, they conducted an initial screening to determine the research subjects according to the specific criteria established for this study: early adolescents aged 13-16 and victims of peer bullying. Next, the researchers administered the questionnaire directly to the participants. A total of 199 questionnaires were distributed. After the questionnaires were completed, the researchers selected subjects based on specific research subject criteria. 148 subjects met the criteria, namely having experienced all three forms of peer bullying: physical or verbal bullying, exclusion from friends, and spreading rumors or damaging relationships with other friends. The researchers then tabulated the data and distributed the research results. They analyzed the data to test the hypotheses and draw conclusions.

3.5 Data Analysis Technique

The data analysis technique used in this paper is a quantitative descriptive approach, which involves collecting, summarizing, and interpreting the obtained data, which is then reprocessed to produce a clear, focused, and comprehensive picture of the problem being discussed. Initial data analysis involved reliability testing and hypothesis testing using regression analysis. The mediation results were measured using PROCESS Macro (Hayes & Preacher, 2014).

4 Research Results

4.1 Description and Relationships Between Variables

The analysis of peer bullying experiences yielded mean and standard deviations for male adolescents ($M=1.10$; $SD=0.29$) and female adolescents ($M=1.17$; $SD=0.30$). For social anxiety, the mean and standard deviations for male adolescents ($M=2.24$; $SD=0.38$) and female adolescents ($M=2.41$; $SD=0.48$) were also obtained. For social anxiety, the mean and standard deviations were obtained for adolescents with siblings ($M=2.32$; $SD=0.44$) and adolescents without siblings ($M=2.36$; $SD=0.45$). A brief summary is provided in Table 2.

Table 2: Mean and standard deviation of peer bullying and social anxiety experiences by gender and siblings

Variable	Peer Bullying		Social Anxiety	
	M	SD	M	SD
Gender				
Male	1.1	0.29	2.24	0.38
Female	1.17	0.3	2.41	0.48
Sibling				
Having siblings			2.32	0.44
Single			2.36	0.45

Note: M = Mean; SD = Standard Deviation

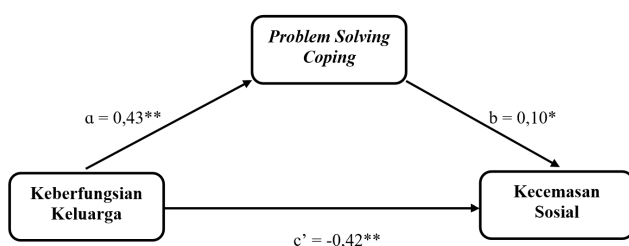


Figure 1: Results of the total effect of variable X on Y

4.2 Hypothesis Testing

The results of data analysis on the study subjects obtained the mean and standard deviation for the family functioning variable ($M=2.32$; $SD=0.44$), the social anxiety variable ($M=2.80$; $SD=0.25$), and the problem-solving coping variable ($M=2.56$; $SD=0.37$).

The results of statistical tests indicate that there is a negative and significant relationship between family functioning and social anxiety ($\beta=-0.63$; $p<0.01$), so the first hypothesis is accepted. There is a positive and significant relationship between family functioning and problem-solving coping ($\beta=0.47$; $p<0.01$), so the second hypothesis is accepted. There is a negative and significant relationship between problem-solving coping and social anxiety ($\beta=-0.17$; $p<0.05$), so the third hypothesis is accepted. A brief summary is in Table 3.

The results of the statistical test of the magnitude of the regression in the hypothetical model found a significant total effect between family functioning and social anxiety ($B = -0.37$; $p = 0.00$), a significant direct effect between family functioning and problem-solving coping ($B = 0.43$; $p = 0.00$), a significant direct effect between problem-solving coping and social anxiety ($B = 0.10$; $p = 0.03$), and a significant indirect effect between family functioning and social anxiety ($B = -0.42$; $p = 0.00$). A brief summary is in Table 4.

The mediation value in this study was obtained at $B=0.04$ with a 95% confidence level. The Sobel test results showed $Z=1.98 > 1.96$ (absolute Z value). The re-

sults of the mediation model test have four conditions: (1) there is a significant relationship between family functioning and social anxiety, (2) there is a significant relationship between family functioning and problem-solving coping, (3) there is a significant relationship between problem-solving coping and social anxiety, and (4) the direct effect value ($c' = -0.42$; $p=0.00$) is smaller than the total effect value ($c = -0.37$; $p=0.00$). This indicates that problem-solving coping partially mediates the relationship between family functioning and social anxiety, thus accepting the fourth hypothesis.

The results of the research analysis indicate that problem-solving coping can act as a mediator in the relationship between family functioning and social anxiety. In other words, problem-solving coping is a mediator between family functioning and social anxiety experienced by adolescents who are victims of peer bullying.

5 Discussion

The findings of this study indicate that family functioning is negatively and significantly associated with social anxiety among adolescents who are victims of peer bullying. This suggests that higher levels of effective family functioning are linked to lower levels of social anxiety. These results are consistent with previous research demonstrating that dysfunctional family environments are significantly associated with elevated anxiety levels in children (McGinn et al., 2010).

Effective family functioning enables members to fulfill their respective roles and responsibilities within the family system. One critical aspect is communication. Families characterized by open, clear, and direct communication tend to foster positive social development in adolescents, equipping them with the skills necessary to interact effectively with others. In this context, communication patterns within the family serve as a model for adolescents' social interactions with peers, thereby reducing the likelihood of social anxiety. Conversely, adolescents raised in emotionally distant

Table 3: Mean, standard deviation, and relationships between variables (N=148) (N=148)

Variable	M	SD	1	2	3
1 Family Functioning	2.32	0.44	1	-0.63 **	0.47 **
2 Social Anxiety	2.8	0.25		1	-0.17 *
3 Problem-Solving Coping	2.56	0.37			1

Note: ** $p < 0,01$; * $p < 0,05$;

Table 4: Regression Analysis

Relationship between variables	B	p
Family Functioning → Social Anxiety	-0.37	0.000
Family Functioning → Problem Solving Coping	0.43	0.000
Problem Solving Coping → Social Anxiety	0.1	0.030
Family Functioning → Problem Solving Coping → Kecemasan Sosial	-0.42	0.000

Note: B = Regression coeff.

families—characterized by low warmth, limited support, and lack of affection—are more likely to experience difficulties in expressing emotions, which may contribute to heightened social anxiety in social situations (Anglely et al., 2014). Furthermore, previous findings indicate that children with social anxiety often perceive their parents as low in warmth and high in control (Chapman & Woodruff-Borden, 2009).

This study also found a significant positive relationship between family functioning and problem-solving coping. During childhood, emotion-focused coping tends to dominate, as parents play a central role in managing problems. However, as adolescents gain autonomy, they increasingly rely on coping strategies shaped by earlier family experiences. One important dimension of family functioning is problem-solving, where effective families demonstrate collaborative approaches in addressing challenges. Through modeling and interaction, parents influence the development of adolescents' coping strategies. When families provide support and constructive responses to problems, adolescents are more likely to adopt adaptive coping mechanisms, particularly problem-solving coping (Cocoradă & Mihalaşcu, 2012).

In addition, the findings reveal a significant negative relationship between problem-solving coping and social anxiety, indicating that greater use of problem-focused coping is associated with lower levels of social anxiety. This result is consistent with prior studies suggesting that adaptive coping strategies contribute to better psychological adjustment (Houtzager et al., 2014). In contrast, adolescents with higher levels of social anxiety tend to rely on avoidance-based coping strategies, such as distraction or withdrawal, including excessive engagement with social media, which may temporarily reduce anxiety but do not address underlying issues (Ballash et

al., 2006; Honnekeri et al., 2017).

Importantly, this study highlights the role of coping strategies as a mediating variable in the relationship between family functioning and social anxiety. Adolescents experiencing social anxiety are more likely to come from dysfunctional family environments and to employ maladaptive coping strategies, particularly avoidance. Thus, coping strategies serve as a key mechanism through which family functioning influences social anxiety, emphasizing the importance of fostering adaptive coping within the family context.

The study also found that female adolescents reported higher levels of social anxiety compared to males. This finding aligns with previous research indicating that adolescent girls are more vulnerable to social anxiety, potentially due to higher exposure to relational aggression, including social exclusion and psychological bullying (Gren-Landell et al., 2011; Honnekeri et al., 2017). Consistent with this, the present study also found that female adolescents reported experiencing more frequent peer bullying.

Furthermore, no significant differences in social anxiety were found between adolescents with and without siblings. This suggests that siblings may not serve as the primary source of emotional support in mitigating social anxiety. However, previous research indicates that sibling relationships can contribute to conflict and stress within the family, particularly in the absence of effective parental regulation (Bowes et al., 2014). Poor sibling dynamics may therefore exacerbate, rather than alleviate, psychological distress.

6 Conclusion and Implications

6.1 Conclusion

Based on the findings, it can be concluded that family functioning, problem-solving coping, and social anxiety are significantly interrelated among adolescents who are victims of peer bullying. Moreover, problem-solving coping partially mediates the relationship between family functioning and social anxiety, indicating that family dynamics influence adolescents' anxiety both directly and indirectly through coping mechanisms.

6.2 Implications

These findings underscore the importance of promoting effective family functioning as a protective factor against adolescent social anxiety. Families are encouraged to strengthen key aspects of functioning, including open communication, collaborative problem-solving, clear role distribution, emotional support, and behavioral regulation. Fostering warmth, attachment, and mutual responsibility within the family can help adolescents develop adaptive coping strategies, particularly problem-focused coping, which is essential for managing social challenges and reducing anxiety.

Parents, in particular, play a critical role during adolescence, a developmental stage marked by identity exploration and increased vulnerability to social stressors. By being responsive and supportive, parents can guide adolescents in selecting appropriate coping strategies and navigating social difficulties more effectively.

For future research, it is recommended to examine additional factors influencing adolescent social anxiety beyond peer bullying, such as family conflict, neglect, and excessive parental control. Furthermore, distinguishing between state and trait social anxiety may provide a more nuanced understanding of adolescents' experiences. Considering the broader ecological context, future studies should also explore the role of school and community environments in shaping social anxiety among adolescents.

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