STUDIA UBB PSYCHOL.-PAED., LXX, 1, 2025, p. 51-72
(Recommended Citation)
DOI:10.24193/subbpsyped.2025.1.03

Empathy and Peer Defending: Half-longitudinal Mediation Role of Social and Emotional Competencies

Alexandra M. SABOU[1], Ionuț Stelian FLOREAN[2,3], Anca DOBREAN[2,3*]

ABSTRACT. Empathy has been studied systematically in relation to school bullying. It is also an important component of bullying prevention and intervention programs aimed at promoting bystander intervention. These interventions encourage peers to intervene and defend the victim or stop the aggressor by increasing empathy levels. Previous research has highlighted that social and emotional competencies (SEC) are essential in both cognitive and affective empathy and prosocial behaviors such as defending. However, few studies have addressed the mechanisms by which empathy facilitates defense. In this study, we tested whether SEC mediate the relationship between first cognitive, then affective empathy and defending in a cross-lagged panel model for a half-longitudinal design. Participants included 414 adolescents with answers at both time points, and 281 with answers only at T1. The mean age of participants at T1 was 12.72 (SD = 1.14), while for T2 it was 12.30 (SD = 0.89). Results confirm the indirect effect of empathy on defending through SEC only for cognitive empathy and not for affective empathy.

Keywords: empathy, defending, social and emotional competencies

[1] Doctoral School "Evidence-based assessment and psychological interventions", Babes-Bolyai University, Cluj-Napoca, Romania
[2] The International Institute for the Advanced Studies of Psychotherapy and Applied Mental Health, Babes-Bolyai University, Cluj-Napoca, Romania
[3] Department of Clinical Psychology and Psychotherapy, Babes-Bolyai University, Cluj-Napoca, Romania
* Corresponding author: ancadobrean@psychology.ro

Date of submission: 11.03.2025

ABSTRAKT. Empathie wurde systematisch im Zusammenhang mit Schulmobbing untersucht und ist ein wichtiger Bestandteil von Präventions- und Interventionsprogrammen, die darauf abzielen, die Bereitschaft von Zuschauer*innen zur Intervention zu fördern. Diese Maßnahmen ermutigen Gleichaltrige einzugreifen, indem sie das Opfer verteidigen oder den Täter stoppen, indem sie das Empathieniveau erhöhen. Frühere Forschung hat hervorgehoben, dass soziale und emotionale Kompetenzen (SEK) sowohl für kognitive als auch für affektive Empathie sowie für prosoziale Verhaltensweisen wie das Verteidigen essenziell sind. Dennoch gibt es nur wenige Studien, die die Mechanismen untersuchen, durch die Empathie das Verteidigen erleichtert. In dieser Studie überprüften wir, ob SEK die Beziehung zwischen zunächst kognitiver, dann affektiver Empathie und dem Verteidigungsverhalten in einem Cross-Lagged-Panel-Modell innerhalb eines halb-longitudinalen Designs vermittelt. An der Studie nahmen 414 Paare von Jugendlichen teil, die zu beiden Messzeitpunkten Antworten gaben, sowie 281 Teilnehmende nur mit Antworten zu T1. Das Durchschnittsalter der Teilnehmenden betrug bei T1 12,72 Jahre (SD = 1,14) und bei T2 12,30 Jahre (SD = 0,89). Die Ergebnisse bestätigen den indirekten Effekt von Empathie auf das Verteidigungsverhalten über SEK nur für die kognitive, nicht jedoch für die affektive Empathie.

Schlüsselwörter: Empathie, Verteidigung, soziale und emotionale Kompetenzen

1. EMPATHY AND PEER DEFENDING: HALF-LONGITUDINAL MEDIATION ROLE OF SOCIAL AND EMOTIONAL COMPETENCIES

School bullying is defined as a form of intentional and repeated aggression over time with a power imbalance between the involved parties (Olweus, 2013). It remains a common problem in today's educational system, contributing to a host of mental health issues for both victims and bullies (Hymel & Swearer, 2015). Although it has been viewed as a dyadic interaction, observational research has revealed that peers are also usually involved (Craig et al., 2000). Salmivalli et al. (1998) identified six different roles concerning bullying: victim, bully, reinforcer of the bully, assistant of the bully, defender of the victim, and outsider. Evidence suggests that the involvement of different participants in bullying could influence the outcome of the interaction between the victim and the bully, favoring the former or the latter (Salmivalli, 1999). Specifically, assisting or supporting the bully promotes aggression, while helping the victim can hinder it.

Being defended by a peer was positively related to the adjustment and social status of the victim (Sainio et al., 2011) and to diminished daily mood problems (Laninga-Wijnen et al., 2024). Being defended could also moderate the risk factors for victimization, such as social anxiety and peer rejection (Kärnä et al., 2010). These risk factors were greater in classrooms with high bully reinforcing and low peer defending. Additionally, bystander interventions, including strategies for raising victim defending among peers, are effective in reducing bullying behaviors (Hikmat et al., 2024; Polanin et al., 2012). Therefore, it would be advantageous to identify the factors that facilitate defending behavior. This way, we can contribute to better and more efficient bullying prevention and intervention programs.

Empathy is one such factor that has been consistently investigated in relation to different aspects of bullying, such as significant associations between low empathy and bullying (Jolliffe & Farrington, 2006). One conceptualization of empathy identified four recurrent themes in empathy definitions: understanding, feeling, and sharing another person's emotional states, with a differentiation between the self and the other (Eklund & Meranius, 2021). There are two types of empathy, cognitive and affective (Watt, 2007), each with its own biological network (Winters et al., 2021). Cognitive empathy refers to the ability to understand the perspectives and feelings of others (Dorris et al., 2022), whereas affective empathy reflects sharing of the emotional response of the interacting partner (Cuff et al., 2016). A systematic review indicated that bullying was negatively associated with both affective and cognitive empathy, victimization was negatively associated only with cognitive empathy, and defending was consistently positively associated with both types of empathy (van Noorden et al., 2015). Meta-analytic data also confirmed these results in multiple instances (Imuta et al., 2022; Ma et al., 2019). Given its importance in bullying studies, raising empathy towards victims or developing social skills such as empathy have been components of many intervention or prevention programs aimed at reducing bullying or victimization in schools (Gaffney et al., 2021). For example, findings of the anti-bullying Finnish program KiVa suggest higher affective empathy levels for children in the experimental group, regardless of age, status, prior empathy levels, or classroom bullying norms (Garandeau et al., 2022). The KiVa anti-bullying program was also effective in reducing both peer victimization and bullying (Kärnä et al., 2013). Another eleven-week empathy training program successfully reduced bullying behaviors and raised empathic skills in children (Sahin, 2012). A similar example was offered by Palade and Pascal (2023), whose five-day intensive empathy training program efficiently increased empathy and reduced verbal bullying in classrooms where the teacher was present during the intervention.

Previous examples indicate that interventions, including empathy training (Gaffney et al., 2021), can effectively reduce bullying and victimization. Although we know empathy's potential in these interventions, we know little about the mechanisms underlying this association. One potential candidate are social and emotional competencies (SEC). According to The Collaborative for Academic, Social and Emotional Learning (CASEL) (CASEL, 2013), social and emotional competencies reflect skills allowing people to recognize, understand, regulate, and express emotions in the larger context of social interactions, all while making responsible decisions. There are five interconnected areas in which SEC can be categorized: self-awareness, self-management, social awareness, relationship skills, and responsible decision making. Social-emotional learning interventions aiming to improve SEC are effectively enhancing social functioning, social inclusion, and school well-being in students (Hassani, 2024). Furthermore, a recent review of meta-analyses concerning universal school-based social-emotional learning programs confirmed statistically significant results, including better SEC, prosocial behaviors, academic success, lower levels of conduct problems, and emotional distress (Durlak et al., 2022).

General, cognitive, and affective empathy have been positively associated with total SEC scores in several studies (Ferreira et al., 2024; Hirn et al., 2019; Llorent et al., 2020, 2021). In younger children, positive empathy, meaning expressing happiness resulting from understanding another person's positive affect, was positively associated with social competence at the first measurement and at the second time point one year later (Sallquist et al., 2009). More empathic children demonstrate a better understanding of socially sensitive behavior, such as shyness and aggression, than their less empathic peers, which might indicate better social competence (Findlay et al., 2006). In adolescents, changes in empathy predicted individual differences in social competencies twenty-three years later (Allemand et al., 2015). Additionally, children's social competencies mediate the relationship between parents' cognitive empathy and children's emotional and behavioral problems (Meng et al., 2020). Given that affective and cognitive empathy are heritable traits (Abramson et al., 2020), children's empathy could also predict better SEC for themselves.

SEC is of great importance not only for the healthy development of children and important life outcomes in adulthood but also plays a relevant role in behavioral change processes (Domitrovich et al., 2017). Interventions aimed at developing better SEC in children efficiently raise prosocial behaviors, such as helping, comforting, and cooperating (Schonert-Reichl et al., 2012). Results are consistent with meta-analytic data, demonstrating overall improvement in social skills, mental health, and prosocial behavior (Sklad et al., 2012). Indeed, adolescents who act in a prosocial manner are more socially accepted by their

peers and have better peer relationships (Zorza et al., 2013). Additionally, victim-oriented defending, meaning consoling or comforting bullying victims, is positively associated with social acceptance and perceived friendship, which are indicators of SEC (Reijntjes et al., 2016). At the other end of the spectrum, children with aggressive behaviors, for example, bullies and bully-victims have lower levels of SEC in comparison to uninvolved children (Zych et al., 2018). Coelho and Sousa (2021) confirmed better SEC scores for adolescents uninvolved in bullying.

Current study

Evidence thus far shows that higher levels of empathy are associated with peer defending (Ma et al., 2019). Social and emotional skills are positively related to general and specific types of empathy (Ferreira et al., 2024), and are relevant to aggressive and prosocial behaviors during childhood development (Belacchi et al., 2022). Peer status or peer acceptance has been identified as a significant mediator in the relationship between empathy and defending (Zhou et al., 2024). In younger children, being liked by peers was related to more prosocial behaviors and higher levels of emotional competencies (Farina & Belacchi, 2022). These interactions act as a positive feedback loop, encouraging children to further act in prosocial ways. Future interventions concerning bystander behavior and defending victimized peers could benefit from a better understanding of the mechanisms on which these relationships are based. However, we still lack extensive knowledge of how empathy promotes prosocial behavior. We propose that SEC could function as a bridge between empathy and defending, representing the missing link that contributes to empathy's involvement in defending and prosocial behavior. Accordingly, the current study aims to investigate at two time points the role of SEC as a mediator in the relationship between empathy and defending. More specifically, the study's first objective is to test whether SEC mediates the relationship between cognitive empathy and defending, and the second objective is to test SEC's role as a mediator between affective empathy and defending behavior in a sample of Romanian adolescents.

2. METHOD

2.1. Participants

The total sample included 695 participants. Of these, 414 completed both time points and 281 completed the scales only at T1. The number of total participants at T1 was 695, with a mean age of 12.72 (SD = 1.14). Some adolescents

(n = 19) with data at both time points were excluded from the analysis due to invalid responses, meaning all items were answered with one rating such as 1 or 3, regardless of item content. Missing data were managed by full information maximum likelihood (FIML), which showed superior results compared to other techniques such as listwise deletion or mean imputation (Enders, 2001). This enabled us to include participants with scores for only the first time point. Demographic data were only collected at T1. Gender distribution at T1 reflects a majority of boys, with a percentage of 50.94%. Most adolescents were from urban areas (65.75%). Mean age of participants at T2 was 13.20 years (SD = 0.89). In this portion of the sample, 48.30% were boys. Both participants at T1 and T2 had ages ranging from 11 to 15.

2.2. Procedure

Ten schools across four counties from Romania were invited to participate in the study. Informed consent was obtained from parents after they were informed of the study. Only adolescents whose parents signed the informed consent were included in the sample. Additionally, assent from the adolescents was also requested. We first collected data between May and June 2022 (T1), and then, the second time, between November 2022 and January 2023 (T2). We informed all adolescents about the confidentiality of their responses and their right to withdraw from the study at any time. Data were collected online during school hours under the supervision of a trained member of the research team. Adolescents completed an online form containing all questionnaires. The questionnaires were completed in their classrooms or in the computer science labs using their phones or the laptops made available by the school. All three instruments were collected at both time points.

2.3. Instruments

The Basic Empathy Scale (BES) (Jolliffe & Farrington, 2006) was used to measure cognitive and affective empathy in adolescents. It has 20 items, 9 for cognitive empathy and 11 for affective empathy. It can also provide a total empathy score. Both subscale and total empathy scores were calculated by summing all items. Each item is rated on a five-point Likert scale, from 1 representing "Strongly disagree" to 5 meaning "Strongly agree". Of the 20 items, eight were reverse-scored. A representative example of a cognitive item is: *"When someone is feeling 'down' I can usually understand how they feel."*, and an example of an affective item is: *"I tend to feel scared when I am with friends who are afraid."*. In

our sample, the Cronbach's alpha coefficient at T1 was .72 for cognitive empathy and .71 for affective empathy, respectively, while for T2 it was .76 for both cognitive and affective empathy.

The Student Bystander Behavior Scale (SBBS) (Álvarez-García et al., 2021) was used to assess different types of bystander involvement, such as the defender of the victim, pro-bully, or passive behavior. In the current study, we used only the defender subscale of the instrument. The scale is composed of 10 items, each evaluated dichotomously by answering "Yes" or "No". Adolescents are first presented with the definition of bullying and then asked how they reacted in that situation or how they would react in such a situation. A score for defending was obtained by summing all the affirmative answers. Scores could range from 0, reflecting no defending behavior, to 4, representing a more active role as a defender. One example of an item is: *"Talk to the bully later to get them to stop."*. The internal consistency in our sample for T1 was .56 and for T2 .67.

The Social and Emotional Competencies Questionnaire (SEC-Q) (Zych et al., 2018) was used to assess adolescents' social and emotional competencies. It contains 16 items distributed across four subscales: self-awareness, self-management and motivation, social-awareness and prosocial behavior and decision making. Each item is rated on a five-point Likert scale, from 1 representing *"Strongly disagree"* to 5 meaning *"Strongly agree"*. The questionnaire offers the possibility of calculating both subscale scores and a total social and emotional competencies score by summing the scores of each item corresponding to a subscale or all items for the total score. An illustrative example of an item is: *"I know how my emotions influence what I do."*. For this study, we only used the total score for social and emotional competencies. Internal consistency for T1 and T2 was .88, indicating excellent reliability.

2.4. Data analysis

Descriptive preliminary analysis included mean, standard deviation, and correlations between all variables at both time points, and were analyzed using RStudio (RStudio Team, 2024). Reliability analyses were performed using the Jamovi (version 2.3). For the study's main aim, respectively, to test the mediation effect of social and emotional competencies on the relationship between empathy and defending, a cross-lagged panel model for a half-longitudinal design was used. This type of design allows causal relationships to be revealed in datasets with only two time points (Preacher 2015). Although it makes it possible to test for indirect effects, it limits the ability to directly test for stationarity and the stability of the model over time. The half-longitudinal design was introduced by Cole and Maxwell (2003) and estimates the indirect effect by multiplying two

paths, a and b. The first one, path "a", is the effect of the predictor, in this case, first cognitive, then affective empathy at T1 on the mediator, social and emotional competencies at T2. The second one, the "b" path, is the effect of the mediator at T1 on the criterion, specifically peer defending at T2. Although this model cannot directly test for stationarity, it is an important assumption. We used the robust maximum likelihood estimator to adjust for non-normal data to estimate the regression model. The Henze-Zirkler test for multivariate normality at both time points was non-significant, meaning that our data did not fit the normality assumption (Henze & Zirkler, 1990). We also examined the skewness and kurtosis for each variable. Skewness values ranged between -0.09 and -0.87, and kurtosis values between -0.89 and 1.49, considered within normal limits (Lei & Lomax, 2005). For the assessment of indirect effects, maximum likelihood bootstrapped mediation analysis was used, with 3000 iterations. Confidence intervals of 95% were generated, and an indirect effect was considered significant if the confidence intervals did not contain 0 (Preacher & Hayes, 2004). Because this model has zero degrees of freedom, the fit indices are rendered irrelevant.

3. RESULTS

3.1. Descriptive statistics

Table 1 presents descriptive statistics and correlations between all variables at the first and second time points. All correlations were positive and significant, as expected, except for the correlation between affective empathy and SEC at both time points and the correlation between cognitive empathy and defending both at T2, which were not significant.

Table 1. *Means, standard deviations, and correlations between variables*

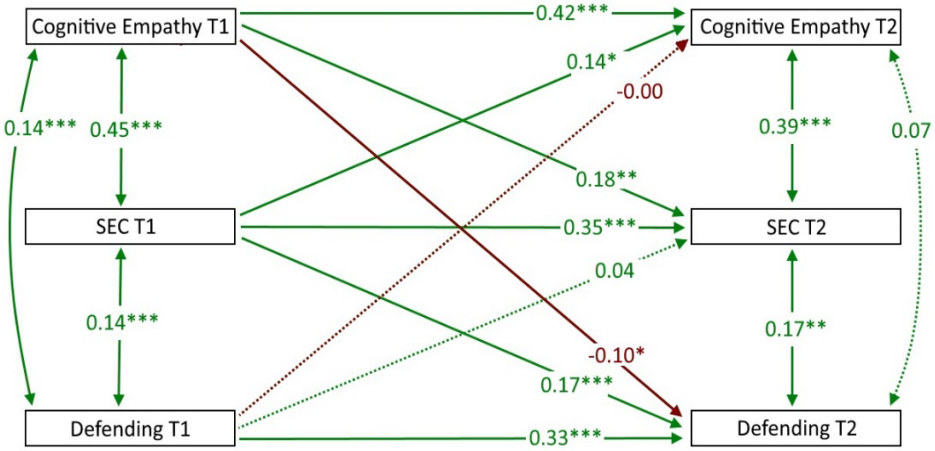
Variable	*M*	*SD*	1	2	3
First time point (T1)					
1. SEC T1	61.93	11.10			
2. Cognitive Empathy T1	35.78	5.45	.45**		
3. Affective Empathy T1	34.62	7.20	.01	.26**	
4. Defending T1	2.56	1.25	.14**	.14**	.15**
Second time point (T2)					
1. SEC T2	61.19	11.06			
2. Cognitive Empathy T2	35.83	5.52	.49**		
3. Affective Empathy T2	34.27	7.59	.08	.26**	
4. Defending T2	2.50	1.37	.22**	.09	.15**

Note. M and *SD* are used to represent mean and standard deviation, respectively. *indicates $p < .05$. ** indicates $p < .01$. SEC= Social and Emotional Competencies

3.2. Half-longitudinal mediation model with cognitive empathy

In order to investigate the first objective of our study, respectively, to test the effect of SEC on the relationship between empathy and defending, we used a cross-lagged half-longitudinal design to test mediations with two time points, as portrayed in Figure 1.

Figure 1. *Cross-lagged panel model for a half-longitudinal design for testing the indirect association between cognitive empathy and defending via social and emotional competencies*



Note. T1= Time 1, T2 = Time 2, SEC = Social and Emotional Competencies, * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$, continuous lines represent significant relationships, dotted lines represent non-significant relationships, green lines represent positive relationships, and red lines represent negative relationships.

We first tested the "a" path of the mediation model, regressing SEC at T2 on cognitive empathy at T1. Indeed, cognitive empathy at T1 predicted higher levels of SEC at T2, β=0.18, p=.003. For the second path, "b", we regressed defending at T2 on SEC at T1. SEC at T1 positively predicted defending at T2, β=0.17, p<.001. Lastly, the indirect effect of the interaction between paths "a" and "b" was also statistically significant, β=0.03, p=.019, confirming the indirect mediation effect. The results of each regression and indirect effects are presented in Table 2. There was a significant negative direct effect of cognitive empathy at T1 on defending behavior at T2, β=-0.10, p=.031.

Table 2. *The standardized coefficients, along with their 95% bootstrap confidence interval*

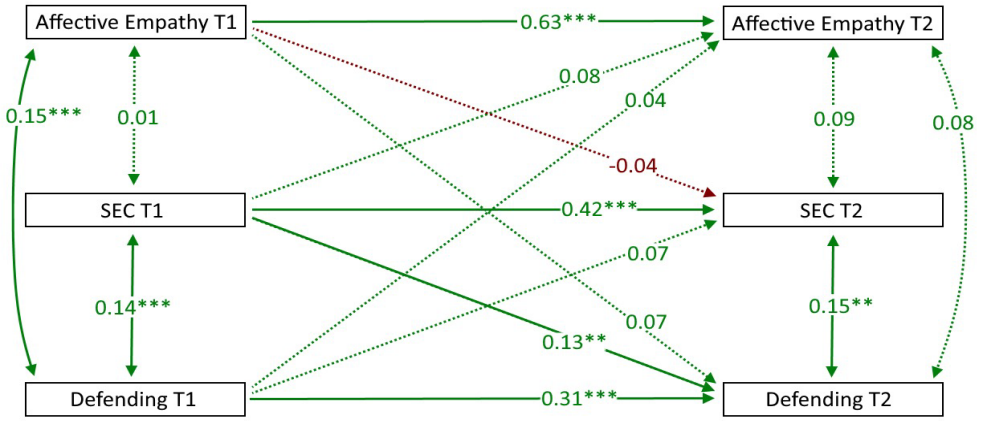
Predictor	Criterion	β	95% CI Lower	95% CI Upper	*z*	*p*
SEC T1	SEC T2	0.35	0.23	0.48	5.52	< .001***
Cognitive Empathy T1	Cognitive Empathy T2	0.42	0.28	0.57	5.69	< .001***
Defending T1	Defending T2	0.33	0.26	0.47	6.78	< .001***
Cognitive Empathy T1	Defending T2	-0.10	-0.05	-0.00	-2.15	.031*
Cognitive Empathy T1	SEC T2	0.18	0.13	0.62	2.94	.003**
Defending T1	Cognitive Empathy T2	-0.00	-0.37	0.34	-0.06	.954
Defending T1	SEC T2	0.04	-0.45	1.11	0.81	.420
SEC T1	Defending T2	0.17	0.01	0.03	3.53	<.001***
SEC T1	Cognitive Empathy T2	0.14	0.01	0.13	2.36	.019*
Indirect effect	*a1*b1*	*0.03*	*0.00*	*0.02*	*2.35*	*.019**

Note. * $p < .05$. **, $p < .01$. ***, $p < .001$, T1 = time 1, T2 = time 2, SEC = Social and Emotional Competencies, CI = Confidence Interval, a1 = Regression coefficient for the effect of cognitive empathy at T1 on SEC at T2, b1 = Regression coefficient of SEC at T1 on defending at T2, β = Standardized Beta Coefficient.

3.3. Half-longitudinal mediation model with affective empathy

The mediation model based on affective empathy is shown in Figure 2. The "a" path, specifically, the regression of SEC at T2 on affective empathy at T1, yielded non-significant results, meaning that affective empathy at T1 does not predict SEC at T2, β=-0.04, p=.146. However, the "b" path, respectively, the regression of defending at T2 on SEC at T1 was significant β=0.13, p=.002. SEC at T1 positively predicted defending at T2. The indirect effect, meaning the interaction between paths "a" and "b", was also non-significant, β=-0.00, p=.467, indicating no indirect effect of affective empathy on defending through SEC. Table 3 summarizes the results of the regression analysis of this model. Affective empathy at T1 had no direct effect on defending at T2, β=0.07, p=.146.

Figure 2. *Cross-lagged panel model for a half-longitudinal design for testing the indirect association between affective empathy and defending via social and emotional competencies*



Note. T1= Time 1, T2 = Time 2, SEC = Social and Emotional Competencies, * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$, continuous lines represent significant relationships, dotted lines represent non-significant relationships, green lines represent positive relationships, and red lines represent negative relationships.

Table 3. *The standardized coefficients, along with their 95% bootstrap confidence interval*

Predictor	Criterion	β	95% CI Lower	95% CI Upper	*z*	*p*
SEC T1	SEC T2	0.42	0.31	0.53	7.36	< .001***
Affective Empathy T1	Affective Empathy T2	0.63	0.58	0.76	14.12	< .001***
Defending T1	Defending T2	0.31	0.23	0.45	6.18	< .001***
Affective Empathy T1	Defending T2	0.07	-0.01	0.03	1.45	.146
Affective Empathy T1	SEC T2	-0.04	-0.20	0.08	-0.78	.436
Defending T1	Affective Empathy T2	0.04	-0.22	0.75	1.07	.283
Defending T1	SEC T2	0.07	-0.20	1.36	1.48	.138
SEC T1	Defending T2	0.13	0.01	0.03	3.09	.002**
SEC T1	Affective Empathy T2	0.08	0.00	0.11	1.96	.050
Indirect effect	*a1*b1*	*-0.00*	*-0.00*	*0.00*	*-0.73*	*.467*

Note. * indicates $p < .05$. ** indicates $p < .01$. *** indicates $p < .001$, T1 = time 1, T2 = time 2, SEC = Social and Emotional Competencies, CI = Confidence Interval, a1 = Regression coefficient for the effect of affective empathy at T1 on SEC at T2, b1 = Regression coefficient of SEC at T1 on defending at T2, β = Standardized Beta Coefficient.

4. DISCUSSION

This study aimed to test the mediating effect of SEC on the relationships between cognitive, respectively affective empathy, and defending behaviors in a cross-lagged half-longitudinal study. The results concerning the first model, including cognitive empathy, confirmed the mediation hypothesis, stating that cognitive empathy is indirectly associated with defending through SEC. Adolescents with higher cognitive empathy have higher levels of SEC and are more likely to be involved in defending behaviors. Several studies have shown that empathy and defending are indirectly related through other factors, such as motivation to defend (Longobardi et al., 2020), peer acceptance (Kim & Park, 2021) and student-teacher relationship (Rizkyanti et al., 2021), but only the latter included cognitive empathy. The indirect effect of cognitive empathy on defending is consistent with results indicating that cognitive empathy contributes more to defending than affective empathy (Rizkyanti et al., 2021). Other studies have highlighted that cognitive empathy is more strongly associated with SEC than affective empathy is (Hirn et al. 2019; Llorent et al. 2020). Children with high cognitive empathy are more likely to notice bullying events, accept responsibility to intervene, and report knowledge on how to intervene (Fredrick et al., 2020). Additionally, SEC at the first time point positively predicted defending six months later at the second time point. Literature confirms that perceived social competence is associated with higher levels of autonomous prosocial motivation, which was later associated with greater prosocial behavior (Collie, 2022). Furthermore, meta-analytic data on the follow-up effects of interventions aimed at promoting social and emotional competencies indicate that these interventions contribute to more prosocial attitudes and behaviors among children (Taylor et al., 2017). Adolescents with high cognitive empathy might be more likely to defend their peers, especially due to better social skills that allow them to navigate difficult situations such as bullying.

Regarding the significant negative direct effect of cognitive empathy on defending, our results are in line with those observing that only affective empathy, not cognitive empathy, was predictive of defending behavior both over time (Van Der Ploeg et al., 2017) and cross-sectionally (Belacchi & Farina, 2012). One possible explanation could be that cognitive empathy alone might not be enough to directly influence prosocial behavior. For example, Belacchi and Farina (2012) showed that children with high affective, not cognitive empathy are more emotionally connected to others, which in turn is associated with more prosocial behavior. At the same time, there are no differences in

cognitive empathy between aggressive and non-aggressive children (Shechtman, 2002; van Zonneveld et al., 2017). Our defending measurement included all defending scores and not only those with higher defending levels. Therefore, it could also take into account adolescents who, although they have higher levels of cognitive empathy, do not involve themselves in prosocial actions such as peer defending. Additionally, according to interdependence theory (Meter & Card, 2015), the decision to act in unjust social situations is influenced not only by individual factors, but also by social dynamic characteristics, such as social status, social reward, or avoidance of harm. Adolescents with high cognitive empathy are less likely to defend their peers and more likely to stand passively when the bully is perceived as popular (Choi & Park, 2021). When the bully was not considered popular, adolescents were more likely to defend their peers, indicating that the decision to intervene or not might be influenced by social factors, as well as individual ones. Taking into consideration both individual and social factors, adolescents with high cognitive empathy might choose not to defend and even avoid defending their peers if they evaluate those situations as threats to their well-being or lacking benefits or rewards.

The second-tested half-longitudinal mediation model, including affective empathy, was not significant. First, affective empathy at T1 did not predict social and emotional competencies at T2. Cognitive and affective empathy have different genetic and environmental origins; specifically, affective empathy is more heritable and cognitive empathy is influenced by the shared family environment (Abramson et al., 2020). Therefore, it is plausible to observe dissimilar patterns across relationships with the other constructs. For example, affective and cognitive empathy relate differently to emotion regulation (Thompson et al., 2022). Higher affective empathy was related to heightened emotional interference tasks, whereas no such relationship was found for cognitive empathy. These findings suggest that greater affective empathy indicates increased emotion regulation difficulties. Concurrently, interpersonal emotion regulation predicts social competencies (Malkoç et al., 2019), and longitudinal data have shown cascading and reciprocal effects between SEC and emotional regulation (Blair et al., 2015). SEC was also positively associated with emotional regulation strategies, such as cognitive reappraisal and expressive suppression (Chen et al., 2024). Furthermore, emotion regulation skills are an important part of social and emotional learning interventions such as RULER, a school-based approach for developing SEC in children (Hoffmann et al., 2020).

Taking all information into consideration, it might be that affective empathy is less compatible with social and emotional competencies since it is not as strongly related to skills such as good emotion regulation strategies,

which are an important part of SEC and are necessary to prosocial behavior. Affective empathy has been previously linked to internalizing symptoms (Bray et al., 2021), and has been shown to predict greater affective distress than cognitive empathy. Decety and Jackson (2004) proposed that, for children with high levels of affective empathy, good emotion regulation skills might be required to manage personal emotional distress related to their empathy responses. This might later allow them to act in prosocial ways, in this case defending victimized peers. Such data could potentially explain why, in our study, affective empathy at the first time point did not predict defending at the second time point and why there was no significant mediation effect of SEC on the relationship between affective empathy and defending.

Implications

The findings of the current study have several theoretical and practical implications. From a theoretical perspective, they broaden our understanding of the relationship between empathy and defending behavior. Following empirical and theoretical points of view (Decety & Holvoet, 2021; Nummenmaa et al., 2008), it is important to acknowledge and view cognitive and affective empathy separately, as they have different routes regarding their effects on defending behavior. Our results confirm that SEC represent one intermediate factor, a mechanism through which we can explain cognitive empathy's indirect influence on defending.

From a practical perspective, our data contribute to the improvement of future interventions or school-based prevention programs aimed at reducing bullying and victimization by developing greater empathy levels in adolescents for their victimized peers. First, it would be helpful to consider more personalized programs by identifying whether the included adolescents have deficiencies in empathy or SEC, and specifically, which type of empathy should be further encouraged. Furthermore, future interventions could also include components based on social and emotional learning strategies aimed at developing SEC. Mediators, moderators, or other mechanisms of change, such as SEC, should be routinely analyzed in intervention studies in which better outcomes for the experimental groups are confirmed. One study found that affective empathy, but not cognitive empathy, is associated with somatic complaints, suggesting that interventions promoting SEC could help ameliorate other difficulties, such as somatic complaints (Espejo-Siles et al., 2020) or other factors that could hinder helping behavior.

Limitations and future directions

The current study presents certain limitations that need to be considered. Our design was limited to only two time points, allowing us to test a half-longitudinal cross-lagged mediation model and not a full cross-lagged panel model, thus necessitating measurements at three time points. This has implications for interpreting causality in identified relationships; therefore, we can infer causality only partially. Another limitation was the use of self-reported data. Adolescents could offer socially desirable answers by overestimating or underestimating empathy levels, SEC, or the frequency of defending behaviors, which could skew our data.

Future research could benefit from exploring multiple trajectories. First, multiple bullying roles could be included in further analysis, such as victims, bullies, and other bystanders, such as non-involved peers or adolescents supporting the bully. Huitsing et al. (2014) revealed that victims with the same aggressor tend to defend each other. This indicates that some adolescents have multiple bullying roles, which in turn could lead to different prediction patterns in the relationships among types of empathy, SEC, and defending. By involving multiple roles, interventions can also prevent overreliance on defenders (Downes & Cefai, 2019), especially in light of findings showing that defenders are at risk of developing mental health issues, for example, psychosocial difficulties (Lambe et al., 2017). Moreover, future studies could address multiple mediators and moderators to further expand the relationship between each type of empathy and defending. An example of a potential mechanism is the ability to regulate emotions or specific emotion regulation strategies. If proven to be relevant, developing such abilities could help mitigate the effect of the emotional distress created, for example, when experiencing affective empathy on prosocial actions. Finally, future interventions could include SEC components in interventions aimed at reducing victimization and bullying, besides components aimed at raising empathy levels in bystanders.

5. CONCLUSIONS

In summary, the current study aimed to test the indirect effect of SEC on the relationships between first cognitive empathy and second affective empathy and defending behavior in a sample of Romanian adolescents. The results of the half-longitudinal cross-lagged mediation design revealed a significant indirect effect of SEC on the relationship between cognitive empathy and defending. In this model, cognitive empathy at T1 positively predicted SEC at T2 and SEC at

T1 positively predicted defending at T2. No significant direct effects of cognitive empathy at T1 on defending at T2 were identified. The mediation model including affective empathy yielded no significant indirect effects. The only significant relationship was between SEC at T1 positively predicting defending at T2. Findings confirm that SEC are a significant mechanism for defending behavior but only for cognitive empathy. Our results have implications for future theoretical developments and upcoming interventions meant to reduce bullying and victimization by bystander involvement.

REFERENCES

Abramson, L., Uzefovsky, F., Toccaceli, V., & Knafo-Noam, A. (2020). The genetic and environmental origins of emotional and cognitive empathy: Review and meta-analyses of twin studies. *Neuroscience & Biobehavioral Reviews*, *114*, 113–133. https://doi.org/10.1016/j.neubiorev.2020.03.023

Allemand, M., Steiger, A. E., & Fend, H. A. (2015). Empathy Development in Adolescence Predicts Social Competencies in Adulthood: Adolescent Empathy and Adult Outcomes. *Journal of Personality*, *83*(2), 229–241. https://doi.org/10.1111/jopy.12098

Álvarez-García, D., Thornberg, R., & Suárez-García, Z. (2021). Validation of a Scale for Assessing Bystander Responses in Bullying. *Psicothema*, *33*(4), 623–630. https://doi.org/10.7334/psicothema2021.140

Belacchi, C., & Farina, E. (2012). Feeling and Thinking of Others: Affective and Cognitive Empathy and Emotion Comprehension in Prosocial/Hostile Preschoolers. *Aggressive Behavior*, *38*(2), 150–165. https://doi.org/10.1002/ab.21415

Belacchi, C., Molina, P., Businaro, N., & Farina, E. (2022). Editorial: Socio-emotional skills in relation to aggressive and prosocial behaviors: From early childhood to adolescence. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.1055948

Blair, B. L., Perry, N. B., O'Brien, M., Calkins, S. D., Keane, S. P., & Shanahan, L. (2015). Identifying developmental cascades among differentiated dimensions of social competence and emotion regulation. *Developmental Psychology*, *51*(8), 1062–1073. https://doi.org/10.1037/a0039472

Bray, K. O., Anderson, V., Pantelis, C., Pozzi, E., Schwartz, O. S., Vijayakumar, N., Richmond, S., Deane, C., Allen, N. B., & Whittle, S. (2021). Associations between cognitive and affective empathy and internalizing symptoms in late childhood. *Journal of Affective Disorders*, *290*, 245–253. https://doi.org/10.1016/j.jad.2021.04.034

Chen, L., Bai, S., Zhang, L., Zhou, Y., & Liu, P. (2024). Interoception and social-emotional competence among adolescents: The role of emotion regulation. *Current Psychology*, *43*(32), 26317–26325. https://doi.org/10.1007/s12144-024-06307-8

Choi, B., & Park, S. (2021). When Empathy Leads to Passive Bystanding or Defending of the Victim in a Bullying Situation: Interaction with the Perceived Popularity of the Bully. *Educational Researcher*, *50*(5), 276–289. https://doi.org/10.3102/0013189X20982559

Citing RStudio. (2024, April 26). Posit Support. https://support.posit.co/hc/en-us/articles/206212048-Citing-RStudio

Coelho, V. A., & Sousa, V. (2021). A Multilevel Analysis of the Relation Between Bullying Roles and Social and Emotional Competencies. *Journal of Interpersonal Violence*, *36*(11–12), 5122–5144. https://doi.org/10.1177/0886260518801943

Cole, D. A., & Maxwell, S. E. (2003). Testing Mediational Models with Longitudinal Data: Questions and Tips in the Use of Structural Equation Modeling. *Journal of Abnormal Psychology*, *112*(4), 558–577. https://doi.org/10.1037/0021-843X.112.4.558

Collie, R. J. (2022). Social-emotional need satisfaction, prosocial motivation, and students' positive behavioral and well-being outcomes. *Social Psychology of Education*, *25*(2), 399–424. https://doi.org/10.1007/s11218-022-09691-w

Craig, W. M., Pepler, D., & Atlas, R. (2000). Observations of Bullying in the Playground and in the Classroom. *School Psychology International*, *21*(1), 22–36. https://doi.org/10.1177/0143034300211002

Cuff, B. M. P., Brown, S. J., Taylor, L., & Howat, D. J. (2016). Empathy: A Review of the Concept. *Emotion Review*, *8*(2), 144–153. https://doi.org/10.1177/1754073914558466

Decety, J., & Holvoet, C. (2021). The emergence of empathy: A developmental neuroscience perspective. *Developmental Review*, *62*, 100999. https://doi.org/10.1016/j.dr.2021.100999

Decety, J., & Jackson, P. L. (2004). The Functional Architecture of Human Empathy. *Behavioral and Cognitive Neuroscience Reviews*, *3*(2), 71–100. https://doi.org/10.1177/1534582304267187

Domitrovich, C. E., Durlak, J. A., Staley, K. C., & Weissberg, R. P. (2017). Social-Emotional Competence: An Essential Factor for Promoting Positive Adjustment and Reducing Risk in School Children. *Child Development*, *88*(2), 408–416. https://doi.org/10.1111/cdev.12739

Dorris, L., Young, D., Barlow, J., Byrne, K., & Hoyle, R. (2022). Cognitive empathy across the lifespan. *Developmental Medicine and Child Neurology*, *64*(12), 1524–1531. https://doi.org/10.1111/dmcn.15263

Downes, P., & Cefai, C. (2019). Strategic Clarity on Different Prevention Levels of School Bullying and Violence: Rethinking Peer Defenders and Selected Prevention. *Journal of School Violence*, *18*(4), 510–521. https://doi.org/10.1080/15388220.2019.1566915

Durlak, J. A., Mahoney, J. L., & Boyle, A. E. (2022). What we know, and what we need to find out about universal, school-based social and emotional learning programs for children and adolescents: A review of meta-analyses and directions for future research. *Psychological Bulletin*, *148*(11–12), 765–782. https://doi.org/10.1037/bul0000383

Enders, C. K. (2001). The Performance of the Full Information Maximum Likelihood Estimator in Multiple Regression Models with Missing Data. *Educational and Psychological Measurement*, *61*(5), 713–740. https://doi.org/10.1177/0013164401615001

Espejo-Siles, R., Zych, I., & Llorent, V. J. (2020). Empathy, social and emotional competencies, bullying perpetration and victimization as longitudinal predictors of somatic symptoms in adolescence. *Journal of Affective Disorders*, *271*, 145–151. https://doi.org/10.1016/j.jad.2020.03.071

Farina, E., & Belacchi, C. (2022). Being visible or being liked? Social status and emotional skills in bullying among young children. *European Journal of Developmental Psychology*, *19*(2), 267–282. https://doi.org/10.1080/17405629.2021.1903864

Ferreira, P., Gameiro, F., & Faria, M. (2024). Empathy and Socio-Emotional Competencies: The Perception of Portuguese Adolescents in Today's Changing Environment. *Psychology International*, *6*(3), Article 3. https://doi.org/10.3390/psycholint6030046

Findlay, L. C., Girardi, A., & Coplan, R. J. (2006). Links between empathy, social behavior, and social understanding in early childhood. *Early Childhood Research Quarterly*, *21*(3), 347–359. https://doi.org/10.1016/j.ecresq.2006.07.009

Fredrick, S. S., Jenkins, L. N., & Ray, K. (2020). Dimensions of empathy and bystander intervention in bullying in elementary school. *Journal of School Psychology*, *79*, 31–42. https://doi.org/10.1016/j.jsp.2020.03.001

Gaffney, H., Ttofi, M. M., & Farrington, D. P. (2021). Effectiveness of school-based programs to reduce bullying perpetration and victimization: An updated systematic review and meta-analysis. *Campbell Systematic Reviews*, *17*(2), e1143. https://doi.org/10.1002/cl2.1143

Garandeau, C. F., Laninga-Wijnen, L., & Salmivalli, C. (2022). Effects of the KiVa Anti-Bullying Program on Affective and Cognitive Empathy in Children and Adolescents. *Journal of Clinical Child and Adolescent Psychology*, *51*(4), 515–529. https://doi.org/10.1080/15374416.2020.1846541

Guide, C. (2013). Effective social and emotional learning programs. *Preschool and Elementary School Edition*. https://www.academia.edu/download/36509629/2013-casel-guide.pdf

Håkansson Eklund, J., & Summer Meranius, M. (2021). Toward a consensus on the nature of empathy: A review of reviews. *Patient Education and Counseling*, *104*(2), 300–307. https://doi.org/10.1016/j.pec.2020.08.022

Hassani, S. (2024). Fostering social-emotional competencies to improve social functioning, social inclusion, and school well-being: Results of a cluster non-randomized pilot study. *Mental Health & Prevention*, *36*, 200365. https://doi.org/10.1016/j.mhp.2024.200365

Henze, N., & Zirkler, B. (1990). A class of invariant consistent tests for multivariate normality. *Communications in Statistics - Theory and Methods*, *19*(10), 3595–3617. https://doi.org/10.1080/03610929008830400

Hikmat, R., Suryani, S., Yosep, I., & Jeharsae, R. (2024). KiVa anti-bullying program: Preventing and reducing bullying behavior among students – a scoping review. *BMC Public Health*, *24*(1), 2923. https://doi.org/10.1186/s12889-024-20086-8

Hirn, S. L., Thomas, J., & Zoelch, C. (2019). The role of empathy in the development of social competence: A study of German school leavers. *International Journal of Adolescence and Youth*, *24*(4), 395–407. https://doi.org/10.1080/02673843.2018.1548361

Hoffmann, J. D., Brackett, M. A., Bailey, C. S., & Willner, C. J. (2020). Teaching emotion regulation in schools: Translating research into practice with the RULER approach to social and emotional learning. *Emotion (Washington, DC)*, *20*(1), 105–109.

Huitsing, G., Snijders, T. A. B., Van Duijn, M. A. J., & Veenstra, R. (2014). Victims, bullies, and their defenders: A longitudinal study of the coevolution of positive and negative networks. *Development and Psychopathology*, *26*(3), 645–659. https://doi.org/10.1017/S0954579414000297

Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. *American Psychologist*, *70*(4), 293–299. https://doi.org/10.1037/a0038928

Imuta, K., Song, S., Henry, J. D., Ruffman, T., Peterson, C., & Slaughter, V. (2022). A meta-analytic review on the social–emotional intelligence correlates of the six bullying roles: Bullies, followers, victims, bully-victims, defenders, and outsiders. *Psychological Bulletin*, *148*(3–4), 199–226. https://doi.org/10.1037/bul0000364

Jolliffe, D., & Farrington, D. P. (2006). Development and validation of the Basic Empathy Scale. *Journal of Adolescence*, *29*(4), 589–611. https://doi.org/10.1016/j.adolescence.2005.08.010

Kärnä, A., Voeten, M., Poskiparta, E., & Salmivalli, C. (2010). Vulnerable Children in Varying Classroom Contexts: Bystanders' Behaviors Moderate the Effects of Risk Factors on Victimization. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, *56*(3), 261–282.

Kärnä, A., Voeten, M., Little, T. D., Alanen, E., Poskiparta, E., & Salmivalli, C. (2013). Effectiveness of the KiVa Antibullying Program: Grades 1–3 and 7–9. *Journal of Educational Psychology,* 105(2), 535–551. https://doi.org/10.1037/a0030417

Kim, H. S. N., & Park, K. J. (2021). Effects of Bystanders Emotional Empathy and Social Problem-Solving Skills on Defending Behaviors Against Bullying in Elementary School: Mediated Through Peer Acceptance. *Korean Journal of Child Studies*, *42*(6), 741–753. DOI:10.5723/kjcs.2021.42.6.741

Lambe, L. J., Hudson, C. C., Craig, W. M., & Pepler, D. J. (2017). Does defending come with a cost? Examining the psychosocial correlates of defending behaviour among bystanders of bullying in a Canadian sample. *Child Abuse & Neglect*, *65*, 112–123. https://doi.org/10.1016/j.chiabu.2017.01.012

Laninga-Wijnen, L., Pouwels, J. L., Giletta, M., & Salmivalli, C. (2024). Feeling better now? Being defended diminishes daily mood problems and self-blame in victims of bullying. *British Journal of Educational Psychology*, *94*(4), 1294–1322. https://doi.org/10.1111/bjep.12717

Lei, M., & Lomax, R. G. (2005). The Effect of Varying Degrees of Nonnormality in Structural Equation Modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, *12*(1), 1–27. https://doi.org/10.1207/s15328007sem1201_1

Llorent, V. J., Diaz-Chaves, A., Zych, I., Twardowska-Staszek, E., & Marin-Lopez, I. (2021). Bullying and Cyberbullying in Spain and Poland, and Their Relation to Social, Emotional and Moral Competencies. *School Mental Health*, *13*(3), 535–547. https://doi.org/10.1007/s12310-021-09473-3

Llorent, V. J., González-Gómez, A. L., Farrington, D. P., & Zych, I. (2020). Social and emotional competencies and empathy as predictors of literacy competence. *Psicothema*, *32*(1), 47–53. https://doi.org/10.7334/psicothema2019.106

Longobardi, C., Borello, L., Thornberg, R., & Settanni, M. (2020). Empathy and defending behaviours in school bullying: The mediating role of motivation to defend victims. *British Journal of Educational Psychology*, *90*(2), 473–486. https://doi.org/10.1111/bjep.12289

Ma, T.-L., Meter, D. J., Chen, W.-T., & Lee, Y. (2019). Defending behavior of peer victimization in school and cyber context during childhood and adolescence: A meta-analytic review of individual and peer-relational characteristics. *Psychological Bulletin*, *145*(9), 891–928. https://doi.org/10.1037/bul0000205

Malkoç, A., Gördesli, M. A., Arslan, R., Çekici, F., & Sünbül, Z. A. (2019). The Relationship between Interpersonal Emotion Regulation and Interpersonal Competence Controlled for Emotion Dysregulation. *International Journal of Higher Education*, *8*(1), Article 1. https://doi.org/10.5430/ijhe.v8n1p69

Meng, K., Yuan, Y., Wang, Y., Liang, J., Wang, L., Shen, J., & Wang, Y. (2020). Effects of parental empathy and emotion regulation on social competence and emotional/ behavioral problems of school-age children. *Pediatric Investigation*, *04*(02), 91–98. https://doi.org/10.1002/ped4.12197

Meter, D. J., & Card, N. A. (2015). Defenders of victims of peer aggression: Interdependence theory and an exploration of individual, interpersonal, and contextual effects on the defender participant role. *Developmental Review*, *38*, 222–240. https://doi.org/10.1016/j.dr.2015.08.001

Nummenmaa, L., Hirvonen, J., Parkkola, R., & Hietanen, J. K. (2008). Is emotional contagion special? An fMRI study on neural systems for affective and cognitive empathy. *NeuroImage*, *43*(3), 571–580. https://doi.org/10.1016/j.neuroimage.2008.08.014

Olweus, D. (2013). School Bullying: Development and Some Important Challenges. *Annual Review of Clinical Psychology*, *9*(1), 751–780. https://doi.org/10.1146/annurev-clinpsy-050212-185516

Palade, T., & Pascal, E. (2023). Reducing Bullying through Empathy Training: The Effect of Teacher's Passive Presence. *Behavioral Sciences*, *13*(3), Article 3. https://doi.org/10.3390/bs13030216

Polanin, J. R., Espelage, D. L., & Pigott, T. D. (2012). A Meta-Analysis of School-Based Bullying Prevention Programs' Effects on Bystander Intervention Behavior. *School Psychology Review*, *41*(1), 47–65.

Preacher, K. J. (2015). Advances in Mediation Analysis: A Survey and Synthesis of New Developments. *Annual Review of Psychology*, *66*(Volume 66, 2015), 825–852. https://doi.org/10.1146/annurev-psych-010814-015258

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*(4), 717–731. https://doi.org/10.3758/BF03206553

Reijntjes, A., Vermande, M., Olthof, T., Goossens, F. A., Aleva, L., & van der Meulen, M. (2016). Defending victimized peers: Opposing the bully, supporting the victim, or both? *Aggressive Behavior*, *42*(6), 585–597. https://doi.org/10.1002/ab.21653

Rizkyanti, C. A., Wahyuni, C., & Alatas, S. (2021). Empathy and Defender Role in Bullying at School: Student-Teacher Relationship as Mediator. *Electronic Journal of Research in Educational Psychology*, *19*(2), 227–246.

Sahin, M. (2012). An investigation into the efficiency of empathy training program on preventing bullying in primary schools. *Children and Youth Services Review*, *34*(7), 1325–1330. https://doi.org/10.1016/j.childyouth.2012.03.013

Sainio, M., Veenstra, R., Huitsing, G., & Salmivalli, C. (2011). Victims and their defenders: A dyadic approach. *International Journal of Behavioral Development*, *35*(2), 144–151. https://doi.org/10.1177/0165025410378068

Sallquist, J., Eisenberg, N., Spinrad, T. L., Eggum, N. D., & Gaertner, B. M. (2009). Assessment of preschoolers' positive empathy: Concurrent and longitudinal relations with positive emotion, social competence, and sympathy. *The Journal of Positive Psychology*. https://doi.org/10.1080/17439760902819444

Salmivalli, C. (1999). Participant role approach to school bullying: Implications for interventions. *Journal of Adolescence*, *22*(4), 453–459. https://doi.org/10.1006/jado.1999.0239

Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1998). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, *22*(1), 1–15. https://doi.org/10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T

Schonert-Reichl, K. A., Smith, V., Zaidman-Zait, A., & Hertzman, C. (2012). Promoting Children's Prosocial Behaviors in School: Impact of the "Roots of Empathy" Program on the Social and Emotional Competence of School-Aged Children. *School Mental Health*, *4*(1), 1–21. https://doi.org/10.1007/s12310-011-9064-7

Shechtman, Z. (2002). Cognitive and Affective Empathy in Aggressive Boys: Implications for Counseling. *International Journal for the Advancement of Counselling*, *24*(4), 211–222. https://doi.org/10.1023/A:1023316712331

Sklad, M., Diekstra, R., Ritter, M. D., Ben, J., & Gravesteijn, C. (2012). Effectiveness of school-based universal social, emotional, and behavioral programs: Do they enhance students' development in the area of skill, behavior, and adjustment? *Psychology in the Schools*, *49*(9), 892–909. https://doi.org/10.1002/pits.21641

Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects. *Child Development*, *88*(4), 1156–1171. https://doi.org/10.1111/cdev.12864

Thompson, N. M., van Reekum, C. M., & Chakrabarti, B. (2022). Cognitive and affective empathy relate differentially to emotion regulation. *Affective Science*, *3*(1), 118–134. https://doi.org/10.1007/s42761-021-00062-w

Van Der Ploeg, R., Kretschmer, T., Salmivalli, C., & Veenstra, R. (2017). Defending victims: What does it take to intervene in bullying and how is it rewarded by peers? *Journal of School Psychology*, *65*, 1–10. https://doi.org/10.1016/j.jsp.2017.06.002

van Noorden, T. H. J., Haselager, G. J. T., Cillessen, A. H. N., & Bukowski, W. M. (2015). Empathy and Involvement in Bullying in Children and Adolescents: A Systematic Review. *Journal of Youth and Adolescence*, *44*(3), 637–657. https://doi.org/10.1007/s10964-014-0135-6

van Zonneveld, L., Platje, E., de Sonneville, L., van Goozen, S., & Swaab, H. (2017). Affective empathy, cognitive empathy and social attention in children at high risk of criminal behaviour. *Journal of Child Psychology and Psychiatry*, *58*(8), 913–921. https://doi.org/10.1111/jcpp.12724

Watt, D. (2007). Toward a Neuroscience of Empathy: Integrating Affective and Cognitive Perspectives. *Neuropsychoanalysis*. https://www.tandfonline.com/doi/abs/10.1080/15294145.2007.10773550

Winters, D. E., Pruitt, P. J., Fukui, S., Cyders, M. A., Pierce, B. J., Lay, K., & Damoiseaux, J. S. (2021). Network functional connectivity underlying dissociable cognitive and affective components of empathy in adolescence. *Neuropsychologia*, *156*, 107832. https://doi.org/10.1016/j.neuropsychologia.2021.107832

Zhou, Y., Wang, S., Deng, X., & Shi, L. (2024). Empathy and defender behaviour in bullying of young children: The mediating role of peer status. *Journal of Psychology in Africa*. https://www.tandfonline.com/doi/full/10.1080/14330237.2024.2311987

Zorza, J. P., Marino, J., Lemus, S. de, & Mesas, A. A. (2013). Academic Performance and Social Competence of Adolescents: Predictions based on Effortful Control and Empathy. *The Spanish Journal of Psychology*, *16*, E87. https://doi.org/10.1017/sjp.2013.87

Zych, I., Beltrán Catalán, M., Ortega Ruiz, R., & Llorent García, V. J. (2018). Social and Emotional Competencies in Adolescents Involved in Different Bullying and Cyberbullying Roles. *Revista de Psicodidáctica*, *23*(2), 2.

Zych, I., Ortega-Ruiz, R., Muñoz-Morales, R., & Llorent, V. J. (2018). Dimensions and Psychometric Properties of the Social and Emotional Competencies Questionnaire (SEC-Q) in youth and adolescents. *Revista Latinoamericana de Psicología*, *50*(2), 98–106.