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Does a Social and Emotional Learning Program Have the Same Effect for all Students Regardless of Their Bullying Roles?

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ABSTRACT

This study analyzed whether students involved in different bullying roles (i.e., victims, bullies, bully-victims, non-involved) benefit differently from participating in the Positive Attitude Upper Middle School (PAUMS) Social and Emotional Learning (SEL) program. Participants were 876 middle school students (i.e., 7th and 8th graders; $M_{age} = 12.81$ years, $SD = 1.07$ years; 440 boys and 436 girls). Five hundred and thirty-one students (60.6%, 29 classrooms) received the intervention, while 345 students (39.4%, 14 classrooms) formed the control groups. Growth Curve Analyses using three measurement points were employed. Students in the intervention groups showed gains over students in the control group in all four social and emotional competencies analyzed. Participation in the PAUMS SEL program led to greater increases in self-control and social awareness for victims and bully-victims and in responsible decision-making for victims than for non-involved students. Participation in the program did not lead to differences in the evolution of any social and emotional competence (SEC) between bullies and non-involved students. Therefore, the current study highlights that participation in a SEL program may lead to different effects on SECs depending on their bullying role.

IMPACT STATEMENT

Participating in the Positive Attitude Upper Middle School (PAUMS) Social and Emotional Learning (SEL) program helps middle school students improve key social and emotional skills, particularly self-control, social awareness, and responsible decision-making. The study shows that victims and bully-victims benefit the most, highlighting the need for tailored approaches in SEL programs to address different bullying roles.

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Bullying has emerged as a major public health concern, due to its serious negative effects on adolescents' mental and physical health, which tend to persist along the developmental pathway and contribute to the emergence of psychopathology (Arseneault, 2017; Källmén & Hallgren, 2021). The effects of bullying may be particularly problematic during early adolescence (Inchley et al., 2020), as this is a period of rapid and intense change in the development of social and emotional competencies (SEC) (Mahoney et al., 2021). Puberty leads to significant physical, hormonal, and neurological changes that facilitate the development of emotional processing and regulation, making adolescents more sensitive to social feedback and social status (Silvers, 2022). Due to the increased complexity of social interactions, bullying behaviors tend to escalate during this stage (Inchley et al., 2020), with the transition to middle school amplifying both bullying victimization and perpetration, as observed in Portugal and other countries (Coelho et al., 2019, 2022). As early

adolescence is a period of developmental vulnerability, engaging in bullying behaviors, regardless of the role (i.e., bullies, victims, or bully-victims), may result in poor emotional and social adjustment that negatively affects the individuals' health trajectories (Arsenault et al., 2017; Coelho et al., 2022).

Although the negative effects of bullying are evident in adolescents regardless of their different bullying roles (i.e., victims, bullies/perpetrators, and bully-victims) (see Ye et al., 2023, for a review), the differential impact of specific bullying roles on socioemotional adjustment has also been supported. Adolescents who had been victims of bullying tended to report more internalizing problems (e.g., depression, anxiety, self-harm, suicidality, sleep disturbance, substance abuse) and had poorer academic performance (Holt et al., 2015; Hysing et al., 2021; Ye et al., 2023). In contrast, those who bullied others had more conduct disorders (Holt et al., 2015; Hysing et al., 2021; Moore et al., 2014). Bully-victims may be at greater risk of poorer

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mental health than bullies or victims, with evidence suggesting that this role is associated with both externalizing and internalizing problems (Drubina et al., 2023). Furthermore, when comparing the effects of traditional forms of bullying and cyberbullying, there is growing evidence indicating that cyberbullying causes more significant levels of depression, anxiety, loneliness, and suicidal ideation than traditional forms of bullying (Landstedt & Persson, 2014; Li et al., 2024).

In recent decades, a consensus has emerged among researchers, practitioners, and policymakers worldwide that SEC are as important as cognitive skills for school success and play a crucial role in future life (Greenberg, 2023; Mahoney et al., 2021). Several studies have also shown that these competencies either protect or promote children's involvement in bullying (Coelho & Marchante, 2021; Cook et al., 2010; Jenkins et al., 2016; Zych et al., 2019). Due to the inherently social nature of bullying, SEC play an important role in understanding the dynamics of bullying (Coelho & Marchante, 2021; Hymel & Swearer, 2015; Weissberg et al., 2015).

Social and Emotional Learning (SEL) refers to a coordinated set of evidence-based programs and practices designed to improve social-emotional development, positive behavior, interpersonal relationships, and academic success (Mahoney et al., 2021). SEL programs have experienced exponential growth due to rigorous research demonstrating broad, positive impacts for children and youth (Cipriano et al., 2023; Greenberg, 2023; Taylor et al., 2017). Among the most widely implemented SEL interventions are Universal School-Based (USB) SEL interventions. These support the development of intra- and interpersonal skills to promote physical and mental health for all adolescents in each school or grade (Cipriano et al., 2023).

However, there have been recent calls for research on USB SEL interventions to examine the differential effects of these interventions considering groups of adolescents from diverse national and ethnic backgrounds (Greenberg, 2023; Wigelsworth et al., 2024). At the same time, evidence shows that anti-bullying programs work differently for specific intervention sub-groups of adolescents who are involved in different bullying roles, with victims and bully-victims benefiting more from a whole-school anti-bullying program (Strohmeier et al., 2024). Nevertheless, research on the differential impact of SEL programs on adolescents engaged in specific bullying roles is still scarce and requires further exploration.

The current study follows two of the Greenberg, (2023) recommendations for future SEL research. First, USB SEL programs should look beyond the main effects to understand the effects for different groups of adolescents.

Second, SEL programs should examine developmental impacts over time. Accordingly, this study will examine whether participation in the Positive Attitude Upper Middle School (PAUMS) SEL program (a USB SEL program) leads to differential gains for adolescents in different bullying roles over the course of a school year.

SOCIAL AND EMOTIONAL COMPETENCIES

According to Mahoney et al. (2021), SEC includes the ability to understand and manage emotions, achieve positive goals, show caring and concern for others, establish and maintain positive relationships, and make responsible decisions.

The Collaborative for Academic, Social, and Emotional Learning (CASEL), the main proponent of SEL, organizes SEC into five interconnected key competencies: i) self-awareness, ii) self-management, iii) social awareness, iv) relationship skills, and v) responsible decision-making (CASEL, 2020). Accordingly, self-awareness is the ability to understand one's own emotions, thoughts, and values, and their impact on behavior in different social environments. Self-management refers to the ability to monitor and regulate one's emotions and behaviors to promote motivation and the achievement of personal goals. Social awareness includes understanding others, empathy, compassion, and social norms. Relationship skills enable one to establish and maintain positive interpersonal relationships, comply with social norms, and include good communication skills. Responsible decision-making involves making decisions after a thoughtful consideration of different options, particularly considering the well-being of oneself and others.

Children and adolescents' SEC are crucial in addressing bullying, due to its social nature (Coelho & Sousa, 2016; Di Stasio et al., 2016; Jenkins et al., 2016). A range of SEC have been identified as important in protecting or facilitating children's engagement in bullying (Coelho & Marchante, 2021; Cook et al., 2010; Jenkins et al., 2016). SEL has also been shown to be an effective component of comprehensive bullying prevention interventions (Smith & Low, 2013).

BULLYING AND ITS DIFFERENT ROLES

Bullying refers to deliberate and repeated acts of physical, verbal, and/or relational aggression aimed at causing harm or discomfort to an individual who is perceived to be vulnerable because of their physical size, psychological or social power, or other factors (Bradshaw et al., 2014; Olweus, 1993). It can have multiple manifestations, such as physical, psychological, sexual, and cyber forms of

violence (UNESCO, 2019). The advent of technology has led to the proliferation of cyberbullying, which is characterized by physical and/or psychological/emotional intimidation through electronic means (Li et al., 2024).

Bullying may be classified as direct and indirect, with direct engagement including three roles: bully, victim, or bully-victim (Olweus, 1993; Solberg & Olweus, 2003). The bully perpetrates bullying behavior and is seen as having more power or control over the victim. The victim is the person who is the target of bullying and is seen as being in a weaker or more vulnerable social position. Bully-victims are those who not only suffer from bullying but also act aggressively toward others. It is important to note that research has demonstrated the dynamic and fluid nature of bullying roles, with adolescents experiencing multiple bullying roles over time (Ryoo et al., 2015). For example, a longitudinal, population-based cohort study of over 4000 students assessed at age 10 and 13 found that most bully/victims at age 13 had already been pure victims at age 10 (41.6%), but very few bully-victims had previously been pure bullies (3%) (Lereya et al., 2015).

Those who are indirectly involved in bullying interactions (i.e., non-involved) are commonly known as bystanders, individuals who witness bullying acts without directly participating, often passively observing from the sidelines due to fear of retaliation (Salmivalli, 2014). While bystanders may passively accept or even participate in bullying, they may also intervene to stop the bully and protect the victim (Salmivalli, 2014). Because bystanders typically interact with bullying victims based on their social status, they are often perceived as enabling bullying (Obermann, 2011).

THE RELATIONSHIP BETWEEN SOCIAL AND EMOTIONAL COMPETENCIES (SEC) AND BULLYING

The literature examining the relationship between SEC and bullying highlights the complexity and nonlinearity of this relationship (Coelho & Marchante, 2021; Jenkins et al., 2016; Zych et al., 2019).

Adolescents who engage in bullying behavior, whether as perpetrators or victims, often lack problem-solving skills and have more negative self-concepts (Busch et al., 2015; Cook et al., 2010). Additionally, adolescents who are victims of bullying often experience poor social and emotional adjustment (Coelho et al., 2022; Cook et al., 2010; Jenkins et al., 2016; Sousa et al., 2023). As they promote SEC that are typically lacking in adolescents who engage in bullying behaviors (Cipriano et al., 2023; Taylor et al., 2017), SEL programs tend to be an effective component of bullying prevention interventions (Cook et al., 2010). These programs improve adolescents' perspective-taking skills by

helping them to understand that different people may feel differently in the same situation, and by encouraging them to practice putting themselves in someone else's shoes and considering how others might feel in different scenarios (Smith & Low, 2013). As a result, SEL interventions tend to have important implications for adolescents engaged in different bullying roles, as student involvement in bullying has been longitudinally linked to poorer self-control, social awareness, and relationship skills for victims, bullies, and bully-victims (Coelho & Marchante, 2021).

However, bullying is not always associated with poor social skills and may have an instrumental function, as some adolescents bully their peers to gain prestige, power, and status within the social group (Samson et al., 2022). Consequently, adolescents who engage in different bullying roles (i.e., bullies, victims, or bully-victims) demonstrate differences in SEC (Coelho & Marchante, 2021; Zych et al., 2018). Specifically, those who bully tend to exhibit relatively stronger competencies related to self-control, social awareness, and responsible decision-making (Coelho & Marchante, 2018).

While the literature on the relationship between SEC and bullying is extensive, only a few studies have investigated the relationship between the specific core competencies identified by CASEL (2020) and the different bullying roles (Greenberg, 2023; Wigelsworth et al., 2024). Therefore, more evidence is needed to further explore how SEL programs affect adolescents' SEC who assume different bullying roles. Understanding this differential impact will help design interventions that address the specific needs of bullies, victims, and bully-victims by considering their strengths and weaknesses in SEC.

Self-Control and Bullying

Adolescents who have difficulty regulating emotions and exhibit high levels of emotional lability are particularly vulnerable to becoming victims of bullying (Busch et al., 2015; Jenkins et al., 2016). According to Smith and Low (2013), almost half of children respond to bullying with highly emotional reactions that increase the likelihood of being victimized by peers. Self-control appears to be particularly significant for bully-victims, as adolescents who respond to bullying with anger and emotionally charged responses are more likely to be victimized, and perpetration and victimization are negatively associated with the adolescents' levels of self-control (Chui & Chan, 2013; Jenkins et al., 2016).

Levels of self-control may help to distinguish victims from bully-victims, as bullies may target individuals who have more pronounced responses to teasing or torment, making them vulnerable to victimization due to their low levels of self-control (Zych et al., 2018). However, lower

levels of self-control are not linearly associated with being a victim of bullying. In a study conducted with Portuguese adolescents, both bullies and bully-victims showed lower levels of self-control than non-involved adolescents (Coelho & Marchante, 2021).

Social Awareness and Bullying

As social awareness encompasses empathy, compassion, understanding others, and understanding social norms (CASEL, 2020), both social and empathic awareness have been consistently identified as protective factors against engaging in bullying behaviors (Coelho & Marchante, 2018; Jenkins et al., 2016; van Noorden et al., 2015). Furthermore, increased awareness of others' feelings not only promotes respectful treatment, but also encourages intervention in bullying situations (van Noorden et al., 2015).

In contrast, low levels of social awareness are associated with more hostile and aggressive behavior, including bullying, in social situations (Coelho & Marchante, 2018; Jenkins et al., 2016). In addition, bullies often use more aggressive conflict management strategies and distort social cues and situations (Olweus, 1993).

Relationship Skills and Bullying

Relationship skills are risk factors for engaging in bullying, as this phenomenon does not occur in a social vacuum, but it is influenced by the broader school environment (Thornberg et al., 2017). During adolescence, the ability to successfully establish and maintain friendships serves as a protective factor against being bullied (Strindberg & Horton, 2022). The quality of friendships is associated with the bullying roles. Adolescents who have been victims or perpetrators of bullying, as well as those who are both perpetrators and victims, tend to experience more difficulty interacting with their peers (Busch et al., 2015; Zych et al., 2019). Moreover, victims and bully-victims tend to have less popular friends (Cao et al., 2024).

Relationship skills are also associated with initiating and maintaining positive interpersonal relationships while adhering to social norms (Zych et al., 2018). However, research on the relationship between these competencies and bullying shows some inconsistencies. Some studies suggest that both perpetrators and victims of bullying often exhibit poor pro-social behavior skills (Busch et al., 2015; Zych et al., 2019). In contrast, other evidence suggests that there are no significant differences in the relationship skills of adolescents involved in bullying, regardless of their role, compared to those not involved in bullying (Coelho & Marchante, 2021), and that bullies may gain social prestige from dominating their peers (Samson et al., 2022).

Responsible Decision-Making and Bullying

Research on the relationship between responsible decision-making and bullying remains scarce, as responsible decision-making has only recently been recognized as a core dimension of social and emotional competence (Coelho & Sousa, 2016). Existing evidence shows that bully-victims show lower levels of responsible decision-making than victims (Coelho & Marchante, 2021) and adolescents who have not engaged in bullying behaviors (Zych et al., 2018).

Present Study

SEL programs play an important role in preventing adolescents' involvement in bullying behaviors (Cook et al., 2010; Smith & Low, 2013). However, further studies are needed to examine the relationship between SEC, as defined by CASEL (2013), and adolescents' engagement in different bullying roles (i.e., bullies, victims, or bully-victims). Although longitudinal studies have examined adolescents' engagement in different bullying roles (Salmivalli, 1999) and peer victimization (Sumter et al., 2012), longitudinal evidence on the effects of SEC on bullying is scarce (Coelho et al., 2017; Hymel & Swearer, 2015).

The purpose of this study is to investigate whether participation in the Positive Attitude Upper Middle School (PAUMS) SEL program, a USB SEL program, results in differential gains in social and emotional competence (SEC) for adolescents who are engaged in different bullying roles over the course of a school year. This program was selected due to the positive effect of participation on several SEC outcomes, namely relational skills, self-control, or social awareness (Coelho et al., 2017, 2023). Specifically, this study aims to analyze whether the PAUMS SEL program leads to enhanced SEC, including self-control, social awareness, relationship skills, and responsible decision-making, at a follow-up assessment, for adolescents who participated in the program compared to adolescents in the control group (hypothesis one). In addition, it will be examined whether adolescents who are engaged in different bullying roles show different trajectories in SEC (hypothesis two). Confirmation of these first two hypotheses is a necessary condition for analyzing the third hypothesis, which examines whether adolescents engaged in different bullying roles benefit differently from participating in the PAUMS SEL program.

METHOD

Study Design

This study was approved by the Ethics Committee of the institution where it was conducted (reference UL/CE/

CIPD/2307). It was designed based on the national ethical principles outlined in the Code of Conduct for Portuguese Psychologists and the relevant national legislation.

This was a longitudinal, quasi-experimental design, involving experimental and control groups, incorporating growth curve analyses to evaluate the effects of the PAUMS SEL program on students' social and emotional competencies.

Participants

Participants were part of wave 3 (the third year of implementation) of a nationally disseminated SEL program. After accounting for attrition, described below, the sample for the current study consisted of 876 middle school students (i.e., 7th and 8th grades, distributed across 43 classrooms), which were included in the statistical analysis. Classroom sizes ranged from 16 to 27 students ($M_{classroomsize} = 20.88$; $SD = 2.16$). Of these students, 440 (50.2%) were boys and 436 (49.8%) were girls. At Time 1, students were between 12 and 16 years old ($M_{age} = 12.81$ years, $SD = 1.07$ years). In the Portuguese system, students attending middle school are typically aged between 12 and 15 years old. Therefore, the 16-year-old participants had failed one or two academic years and were still enrolled in middle school.

The sample was collected from 18 public middle schools located in mainland Portugal and the Madeira Archipelago—90% of Portuguese middle school students study in public schools. Five hundred thirty-one students (60.6%, 29 classrooms) received the intervention, while 345 students (39.4%, 14 classrooms) formed the control groups. Assignment to intervention or control groups was made at the classroom level rather than at the individual level. The assignment of classrooms was conducted by the school groupings, following a 2:1 ratio of assignment to

intervention and control groups (as described in Coelho et al., 2022). Students who participated in the intervention group attended almost all the sessions initially programmed ($M_{sessions} = 12.32$, $SD = 1.28$). Additional information about the participants is shown in Table 1.

Schools varied in relation to the ethnicity and socioeconomic status of their students. In terms of ethnicity, the proportion of students from a migrant background ranged from 4 to 18%. Most participants (745, 85%) attended schools where the proportion of students with a migrant background was at the lower end, ranging from 4% to 12%. Regarding socioeconomic status, 652 students (74.4%) attended schools where there was an average percentage of students (i.e., between 25 and 37%) benefiting from Free and Reduced School Meals (FRSM). In contrast, 159 students (18.2%) attended schools with a low percentage (i.e., from 15 to 18% of students) benefiting from FRSM, and 65 students (7.4%) attended schools with a significantly higher percentage (62%), i.e., 543 students, benefiting from the FRSM program.

Seven students (0.8%) did not participate in the first assessment because they were not yet enrolled in the schools at the start of the study. They only became available during the second assessment and were subsequently included in the sample. Regarding attrition, 27 students (2.9%) did not participate in the second assessment due to unavailability at Time 2, while 37 students (3.9%) were absent from the third assessment, primarily because they had transferred to schools outside the school group. Students who were not assessed at Time 3 were excluded from the analysis, as there was no information available about their bullying roles. Additionally, 19 parents did not provide consent for their adolescents to participate in the assessments, reducing the final sample size from 895 to 876.

Table 1. Self-Reports - Descriptive Statistics for Social and Emotional Competencies across times, per Gender, Group, and Bullying Role

	Self-Control			Social Awareness			Relationship Skills			Responsible Decision-Making		
	Time 1 <i>M</i> (<i>SD</i>)	Time 2 <i>M</i> (<i>SD</i>)	Time 3 <i>M</i> (<i>SD</i>)	Time 1 <i>M</i> (<i>SD</i>)	Time 2 <i>M</i> (<i>SD</i>)	Time 3 <i>M</i> (<i>SD</i>)	Time 1 <i>M</i> (<i>SD</i>)	Time 2 <i>M</i> (<i>SD</i>)	Time 3 <i>M</i> (<i>SD</i>)	Time 1 <i>M</i> (<i>SD</i>)	Time 2 <i>M</i> (<i>SD</i>)	Time 3 <i>M</i> (<i>SD</i>)
Gender												
Boys (<i>n</i> = 434)	13.19 (3.58)	13.48 (3.33)	13.75 (3.38)	11.54 (3.76)	12.06 (4.20)	12.15 (3.63)	7.89 (3.65)	8.35 (3.91)	8.55 (3.37)	6.26 (2.13)	6.38 (2.24)	6.76 (1.93)
Girls (<i>n</i> = 435)	13.57 (3.27)	13.57 (3.28)	13.48 (3.14)	14.71 (4.20)	14.61 (4.15)	14.63 (3.86)	7.71 (4.15)	8.06 (4.13)	8.36 (3.57)	6.30 (2.23)	6.57 (2.22)	6.85 (1.93)
Group												
Control	14.01 (3.31)	13.49 (3.30)	13.07 (3.24)	13.07 (4.39)	13.12 (4.31)	13.24 (4.04)	8.38 (4.02)	8.19 (3.88)	8.07 (3.33)	6.64 (2.19)	6.40 (2.35)	6.52 (1.89)
Intervention	13.13 (3.43)	13.67 (3.33)	14.05 (3.23)	12.70 (4.28)	13.27 (4.39)	13.55 (3.89)	7.47 (3.84)	8.23 (4.10)	8.68 (3.53)	6.07 (2.15)	6.51 (2.16)	6.97 (1.93)
Bullying Roles												
Non-involved (<i>n</i> = 710)	13.50 (3.30)	13.71 (3.24)	13.80 (3.14)	13.22 (4.29)	13.45 (4.27)	13.52 (3.90)	7.81 (3.94)	8.20 (3.97)	8.45 (3.47)	6.27 (2.13)	6.46 (2.22)	6.81 (1.89)
Victims (<i>n</i> = 89)	13.71 (3.55)	13.12 (3.00)	13.09 (3.31)	14.34 (4.40)	14.10 (4.82)	13.89 (4.04)	7.82 (3.85)	8.07 (3.86)	8.54 (3.39)	6.66 (2.20)	6.82 (2.23)	7.18 (1.98)
Bully (<i>n</i> = 35)	13.97 (4.04)	15.06 (3.96)	14.81 (3.66)	13.45 (5.22)	13.26 (4.46)	13.32 (4.07)	9.10 (4.16)	9.23 (4.24)	9.29 (3.35)	6.29 (2.75)	6.87 (2.62)	6.39 (2.20)
Bully-Victims (<i>n</i> = 35)	11.69 (4.25)	11.09 (3.84)	11.25 (4.19)	10.38 (4.17)	10.88 (4.20)	10.50 (3.75)	6.72 (3.49)	7.78 (5.04)	7.34 (3.56)	5.72 (2.43)	5.38 (2.06)	5.91 (2.18)

Note. *N* = 869.

Procedure

Before recruiting participants, the Academies from the Gulbenkian Academies of Knowledge initiative sought the approval of the school boards. Following approval, informed consent forms were sent to the parents or legal guardians of students attending schools whose directors had agreed to participate at the beginning of the school year. Once completed, these forms were returned to the head teacher of each classroom.

The self-report questionnaires assessing SEC were delivered in Portuguese administered at three different time points: i) Time 1 (T1, October 2021), corresponding to the beginning of the implementation of the PAUMS SEL program (i.e., baseline assessment of SEC); ii) Time 2 (T2, March 2022), by the end of the implementation of the PAUMS SEL program (i.e., post-test); and iii) Time 3 (T3, October 2022) for a follow-up assessment of SEC. The bullying self-report instrument was only completed at T3 given the retrospective nature of the items pertaining to bullying and bullying roles.

The questionnaires were completed online using either school computers or tablets provided by the initiative to ensure that no individual-level data was missing. The same educational psychologists were responsible for administering the questionnaires at all assessment points, which took place during prescheduled classes. Students completed the questionnaires in the presence of their teachers, taking approximately 25 min to finish. In cases where students were absent during data collection, the educational psychologist returned the following week ($n = 43$).

Positive Attitude Upper Middle School (PAUMS) SEL Program

The PAUMS SEL program was designed for 7th to 9th graders. It has been implemented as part of the Positive Attitude project since 2004. The program consists of 13 50-minute weekly sessions and aims to improve children's SEC according to the theoretical framework proposed by the Collaborative for Academic Social and Emotional Learning (CASEL). It is a manualized, universal (i.e., including all students in each class), classroom-based program, integrated into the curriculum, and delivered weekly in Portuguese in each classroom by an educational psychologist in the presence of the head teacher.

Previous efficacy studies have shown that the PAUMS SEL Program has positive effects on several SEC. Students consistently identified significant positive outcomes in their perceived social awareness and self-control (Coelho et al., 2015, 2017, 2023), relationship skills and responsible decision-making (Coelho et al., 2023), and their sense of self-esteem (Coelho et al., 2015, 2018). Teachers also

highlighted the positive effects of the program on both students' self-control and social awareness (Coelho et al., 2015). More detailed information on the program can be found in Coelho and Figueira (2011), Coelho and Sousa (2016).

Given the positive results of the program, in 2019 the PAUMS SEL program was one of the blueprint programs selected for nationwide replication by the Gulbenkian Foundation under the Gulbenkian Academies of Knowledge initiative. Six academies have been set up across Portugal in seven different municipalities: one in the North Region (Vizela), one in the Center Region (Pombal), two in the Lisbon and Tagus Valley Region (Lisbon and Setúbal), one in the Algarve (covering the municipalities of Faro and Loulé), and one in the Madeira Archipelago (Machico). For this dissemination of the PAUMS SEL program within the GAK initiative, the Positive Attitude team developed a package that included a standardized manual, training, monitoring, supervision, and an online platform (Coelho et al., 2021). The training lasted 35 h, consisting of 28 h in small groups and seven hours on-site. To monitor and supervise the replication of the PAUMS SEL program in the academies, the developers were on-site for two days during its implementation. The online platform was created to a) register student participation and measure implementation quality indicators; b) collect students' assessments; and c) collect teacher assessments.

Measures

Social and Emotional Competencies

The Social and Emotional Competencies Evaluation Questionnaire (QACSE; Coelho et al., 2015, 2020) was used to assess SEC. This self-report instrument is validated for children and adolescents aged 9 to 16 years. It consists of six subscales with a total of 39 items presented as statements in Portuguese to be rated on a four-point Likert scale ($A = \text{never}$ to $D = \text{always}$). As this study does not focus on social withdrawal and social anxiety, these subscales were excluded and only the four subscales assessing SEC were considered: self-control, social awareness, relationship skills, and responsible decision-making. Each subscale comprises seven items, except for the responsible decision-making subscale, which consists of four items.

The self-control subscale focuses on the ability to monitor and manage one's own emotions and behavior (e.g., "I wait for my turn calmly, without getting nervous."; $\alpha = .73$, $.80$ in the present study). The social awareness subscale evaluates the ability to understand other people, to show empathy and compassion, and to apply social norms (e.g., "I worry when someone is in trouble."; $\alpha = .87$, $.84$ in the present study). The relationship skills subscale measures both

the ability to initiate and maintain positive interpersonal relationships, and communication skills (e.g., “When problems arise my colleagues ask my opinion.”; $\alpha = .71$, $.74$ in the present study). The responsible decision-making subscale assesses the extent of deliberation when faced with different alternatives, requiring adolescents to consider both their own and others’ well-being (e.g., “I analyze several alternatives when I have to make a decision.”; $\alpha = .87$, $.84$ in the present study). This questionnaire has been validated in two studies (Coelho & Sousa, 2016; Coelho et al., 2015, 2020). In the first study, Coelho et al. (2015) established the internal consistency and factor structure of the instrument with 683 middle school students. In the second study (Coelho & Sousa, 2016), the factor structure of the questionnaires was established through a confirmatory factor analysis with 655 middle school students, after adding a responsible decision-making subscale to better align the instrument with CASEL’s theoretical framework.

Bullying Roles

Bullying roles were assessed using the Bullying and Cyberbullying Behaviors Questionnaire–Short Form (BCBQ-SF; Coelho & Sousa, 2020). The BCBQ-SF assesses different types of bullying (i.e., verbal, physical, social/relational, material, and sexual) and cyberbullying behaviors (i.e., denigration, flaming, and posting negative images or videos on social media) in middle school students. The questionnaire includes 20 items, organized into two scales describing bullying perpetration and victimization, respectively. Each scale consists of eight items describing either victimization (e.g., “They teased me, made fun of me or called me mean names.”) or bullying perpetration (e.g., “I spread rumors or lies about another student”) behaviors. The scale items are presented in Portuguese and rated on a five-point Likert scale (1 = *never happened* to 5 = *several times a week*) to determine the frequency of bullying and victimization behaviors during the previous school year. The questionnaire has four additional items that allow for a description of the bullying incidents, such as the location of the bullying episodes or the grade of the bully (i.e., lower, same, or higher grade). In the current study, to attribute the role of victim or bully to a student, the criteria proposed by Solberg and Olweus (2003) were considered. Therefore, these were students who rated as three or more: a) the item describing victimization (or bullying) and, concomitantly, at least b) one of the eight items describing victim (or bully) behaviors. Also, students who filled the criteria for both roles were classified as bully-victims, whereas students who did not meet any of these criteria were considered non-involved.

The factor structure of the BCBQ-SF was supported by confirmatory factor analysis performed on a sample of

1003 students (Coelho & Sousa, 2020). Both scales showed appropriate reliability, with Cronbach’s *alpha* values of $.79$ for victimization and $.82$ for bullying.

Data Analyses

In the context of the current dataset, it was imperative to consider that students sharing the same classrooms had a significantly higher probability of providing highly correlated responses, as described by Heck et al. (2013). Thus, due to the hierarchical and clustered nature of the study dataset, we chose to conduct hierarchical linear modeling in MLwiN 3.05 software (Charlton et al., 2020). Initially, we planned to run four-level models, as the three measures were nested within 876 students, who were further nested within 43 classrooms, and these classrooms, in turn, were nested within 18 schools. However, due to the reduced level of variance at the school level, the final models were three-level models. The log-likelihood function was used to assess model fit, with a model deviance test employed to compare log-likelihoods. Model fit improves when there is a statistically significant difference after accounting for differences in degrees of freedom—specifically, when the log-likelihood of the second model is statistically significantly greater (i.e., the deviance is smaller) than that of the previous model.

The use of an online platform prevented any missing values in the participants’ responses. Therefore, there was no missing data at level 1 in each measurement for those participants who completed the questionnaires. Model parameters were estimated using Full Information Maximum Likelihood, which is also a robust solution for participants missing data at Level 2. To test our research hypotheses, a series of models were created for each outcome. First, an unconditional model (model 0) with no predictors was created to analyze the variance between-classroom and between-individual. Linear time—as the addition of quadratic time did not significantly improve the model for any of the SEC—was added next to assess within-individual variation, creating model 1. Time was coded (0 = *T1*, 1 = *T2*, 2 = *T3*). As the variations in the slopes of SEC over time among students and classrooms did not improve the model fit, these parameters were excluded from the subsequent models. To create model 2, gender and bullying role (non-involved vs. victim vs. bully vs. bully-victim) were entered as individual-level explanatory variables. Girls were used as the comparison group, so all statistics reflect the scores of boys. All comparisons were made relative to non-involved students. In model 3, classroom-level variables such as grade (7th vs. 8th) and group (control vs. intervention) were entered as covariates and explanatory variables at the classroom level.

Group was dummy-coded (0 = *control group*, 1 = *intervention group*). The control group was the base for comparisons, with all results reflecting the intervention group. Model 4 included two cross-level interactions, two between Level 1 and Level 2 variables (i.e., *gender*timeliner* and *bullyingrole*timeliner*). Models 0 - 4 are shown in Supplementary tables. In the final models (c.f. Table 2), as the main aim of the study was to analyze whether the PAUMS SEL program had different effects on students engaged in different bullying roles, two interactions were added to test the remaining hypothesis: a two-way cross-level interaction between Level 1 and Level 3 variables (i.e., *group*timeliner*), and a three-way cross-level interaction terms (*bullyingrole*interventiongroup*timeliner*).

RESULTS

Preliminary Results

Multilevel models were performed. The final models are presented in Table 2. The results show that, after adjusting for all individual- and class-level variables, as well as cross-level interactions, linear time was a statistically significant

predictor of self-control, indicating that it decreased significantly over time. At the individual level, gender was only a statistically significant predictor of social awareness, with boys showing lower levels than girls. Furthermore, boys reported a more pronounced decrease than girls in both social awareness and self-control in the referred period.

Regarding classroom level variables, the grade was not a statistically significant predictor of any SEC, and group (control vs. intervention) only significantly predicted relationship skills, with students in the intervention groups reporting statistically significant lower levels.

PAUMS SEL Program Effectiveness

Although not the primary focus of this study, the analysis of the differential effectiveness of the PAUMS SEL program in relation to bullying roles required an assessment of its impact on the promotion of SEC. Therefore, to test the first hypothesis, the cross-level interactions between group and linear time were analyzed. The intervention group showed statistically significant gains in each of the four SEC assessed (i.e., self-control, social awareness, relationship skills, and responsible decision-making)

Table 2. Multilevel Model Analysis Final Models for Self-Reports

	Self-Control		Social Awareness		Relationship Skills		Responsible Decision-Making	
	$\beta_{0ijk} = 14.15 (0.29)^{***}$		$\beta_{0ijk} = 14.81 (0.32)^{***}$		$\beta_{0ijk} = 8.28 (0.29)^{***}$		$\beta_{0ijk} = 6.62 (0.15)^{***}$	
	Co-efficient β	SE	Co-efficient β	SE	Co-efficient β	SE	Co-efficient β	SE
Classroom								
Grade (if grade 8)	-0.13	0.34	-0.15	0.37	0.01	0.32	-0.17	0.16
Group (if Intervention Group)	-0.74	0.35	-0.64	0.38	-0.85*	0.33	-0.43	0.27
Student								
Gender (if Boys)	-0.19	0.21	-3.09***	0.68	0.26	0.25	-0.01	0.14
Victim	-0.07	0.35	0.58	0.43	-0.34	0.42	0.37	0.23
Bully	-0.08	0.54	-0.11	0.67	0.79	0.64	-0.01	0.35
Bully-Victim	-2.71***	0.56	-3.12***	0.68	-1.43*	0.66	-1.05**	0.36
Time								
Time Linear	-0.43***	0.08	0.10	0.10	-0.15	0.08	-0.01	0.06
Interactions								
Gender (if Boys x Time Linear)	0.22**	0.08	0.21*	0.10	-0.10	0.09	-0.07	0.06
Victim x Time Linear	-1.25***	0.21	-0.86***	0.25	-0.10	0.22	-0.22	0.15
Bully x Time Linear	0.52	0.29	0.05	0.35	0.23	0.31	0.06	0.21
Bully/Victim x Time Linear	-0.89**	0.31	-0.59	0.37	-0.20	0.33	-0.38	0.23
Group (if IG) x Time Linear	0.75***	0.09	0.69***	0.11	0.73***	0.09	0.46***	0.07
Victim x Group (if IG) x Time Linear	1.32***	0.26	0.89**	0.31	0.31	0.27	0.36*	0.18
Bully x Group (if IG) x Time Linear	-0.27	0.39	-0.29	0.47	-0.61	0.42	-0.37	0.28
Bully/Victim x Group (if IG) x Time Linear	1.09**	0.40	1.27**	0.48	0.70	0.43	0.55	0.29
Estimates of Variance Parameters								
Repeated Measures	2.690***	0.093	3.822***	0.132	2.952***	0.102	1.429***	0.049
Individual Intercept	7.133***	0.398	11.037***	0.610	10.810***	0.584	2.847***	0.165
Classroom Intercept	0.652**	0.228	0.629**	0.270	0.349	0.204	0.065	0.050
ICC	.062		.041		.025		.015	
Deviance (-2 _{loglikelihood})	11669.992		12619.260		10810.584		9815.833	
Estimated parameters	21		21		21		21	

Note. * $p < .05$; ** $p < .01$; *** $p < .001$; CG: Control Group; IG: Intervention Group.

(cf., Table 2). In line with the first hypothesis, the students in the intervention group showed a more positive evolution over the period analyzed for each SEC.

Trajectories of Social and Emotional Competencies by Bullying Role

The second hypothesis focused on the trajectory of SEC across the three assessments by bullying role, regardless of the students' participation in the PAUMS SEL program. This hypothesis was partially supported. Regarding self-control, both students who were victims and those who identified as bully-victims showed a decrease in this competency compared to students not engaged in bullying. However, regarding social awareness, only students who identified themselves as victims of bullying reported a decrease compared to non-involved students (cf., Table 2).

PAUMS SEL Program's Effectiveness by Bullying Role

The main aim of the current study was to assess the differential effectiveness of the PAUMS SEL program according to middle school students' bullying roles. Hence, to test hypothesis three, four three-way cross-level interactions—one for each social and emotional competence—were added to the final models, to analyze the relationship between bullying role, group, and time linear for each of the SEC. The results partially supported hypothesis three, as self-control, social awareness, and responsible decision-making had statistically significant trajectories between students involved in at least one bullying role and students not involved in bullying. However, for relationship skills, none of the bullying roles displayed statistically different trajectories when compared to the trajectories of the non-involved students.

Specifically, for self-control, both victims, $\beta = 1.32$, $SE = 0.26$; $z = 5.16$, $p < .001$, and bully-victims, $\beta = 1.09$, $SE = 0.40$; $z = 2.70$, $p = 0.0087$, showed an increase that was statistically significantly larger than for non-involved students. Regarding social awareness, both victims, $\beta = 0.89$, $SE = 0.31$; $z = 2.91$, $p = 0.004$, and bully-victims, $\beta = 1.27$, $SE = 0.48$; $z = 2.63$, $p = 0.009$, gained more from participating in the program than non-involved students. Finally, concerning responsible decision-making, students who had experienced bullying victimization gained more from participating in the program than their non-involved peers, $\beta = 0.36$, $SE = 0.18$; $z = 1.98$, $p = 0.048$.

DISCUSSION

The current study analyzed the differential effectiveness of an SEL program—the PAUMS SEL program—on

students' SEC according to their engagement (or not) in bullying. To further understand this potential differential effectiveness, it examined whether the PAUMS SEL program improved students' SEC and how students' SEC changed over a one-year period due to their involvement in bullying, regardless of whether they were in the control or intervention group.

Fully supporting the first hypothesis, the results showed that the PAUMS SEL program was effective in improving the four SEC analyzed (i.e., self-control, social awareness, relationship skills, and responsible decision-making). These findings are consistent with recent literature on program effectiveness (Cipriano et al., 2023; Taylor et al., 2017), demonstrating the effectiveness of SEL programs when implemented with fidelity. They are also consistent with previous reports on the effectiveness trials of the PAUMS SEL program (Coelho et al., 2015, 2017, 2023).

Regarding the evolution of students' SEC according to their potential engagement in bullying, the results showed that over the one-year period between T1 and T3, victims and bully-victims exhibited a greater decrease in self-control compared to non-involved students. Additionally, victims exhibited a similar decrease in social awareness. Therefore, the second hypothesis was only partially supported, as the evolution of students' SEC according to their bullying roles was only statistically significantly different for self-control and social awareness, but not for relationship skills or responsible decision-making. These findings align with previous longitudinal studies on the differential effects of bullying on SEC, which have shown that students involved in bullying roles tend to exhibit more pronounced decreases in self-control, social awareness, and relationship skills compared to non-involved students (Coelho & Marchante, 2021). However, they are less pronounced than those reported in these studies, as no significant results were observed for bullies in the present study.

These findings are also consistent with evidence supporting the instrumental role of SEC in understanding bullying dynamics, given the inherently social nature of this phenomenon (Coelho & Marchante, 2021; Hymel & Swearer, 2015; Weissberg et al., 2015). Based on this premise, two conclusions can be drawn. First, bully-victims have the lowest levels of SEC, which makes them more vulnerable to engaging in bullying, as they have lower levels in all SEC compared to students not engaged in bullying, after adjusting for all other variables. Second, victims experienced a marked decrease in self-control and social awareness. They may therefore benefit from interventions aimed at helping them regain their previous levels of these competencies, as suggested by several authors (Coelho & Marchante, 2021; Cook et al., 2010; Jenkins et al., 2016).

That the results supported the first hypothesis and only partially supported the second hypothesis, are relevant

findings, however not entirely novel. They mostly provide additional context for the main aim of the current study, which was to analyze the differential effectiveness of the PAUMS SEL program according to students' bullying roles. The results showed that, after participating in the PAUMS SEL program, students in the intervention group who were victims of bullying exhibited a greater increase in self-control, social awareness, and responsible decision-making compared to students who were not involved in bullying. Similarly, students who reported being bully-victims showed greater increases in self-control and social awareness. Hence, these findings mostly support the third hypothesis, indicating that an SEL program may have differential effectiveness for students who are engaged in different bullying roles, as proposed by Coelho and Marchante (2018).

However, from the perspective of the mechanism of change proposed for Universal School-Based SEL programs (cf., Mahoney et al., 2021), the results of the current study are two-fold. On the one hand, the results were promising because: i) the intervention group students who had been victims of bullying reported greater increases in self-control, social awareness, and responsible decision-making than the non-involved students; and ii) the PAUMS SEL program promoted greater increases in self-control and social awareness for the students who needed them most—bully-victims, who reported lower levels of all four SEC. These conclusions support the position of several authors (e.g., Cipriano et al., 2023; Taylor et al., 2017) that SEL programs enhance certain SECs that are typically lacking in students engaged in bullying behaviors and support the notion that SEL programs tend to be effective components of bullying prevention interventions (Cook et al., 2010). On the other hand, there were no differences in the trajectories of SEC between bullies and students not engaged in bullying, which argues against SEL programs as effective bullying prevention interventions, consistent with the findings of Cook et al.'s (2010) study.

Regarding the lack of gains associated with the SEL program for students who admitted to bullying their peers, these students did not differ significantly from students who were not engaged in bullying in any SEC. There were also no statistically significant differences in these students' evolution from T1 to T3 in any SEC compared to students who were not involved in bullying. These results demonstrate that bullies may not experience any negative effects from their aggressive behavior. They also support the conclusions of Arsenio and Lemerise's (2001), which proposed that bullies and non-aggressive children hold distinct perceptions of social competence. Bullies view acts of aggression as appropriate if they achieve the desired outcomes and downplay the importance of being liked and

accepted by most of their peers. As bullies are often socially competent in terms of self-control, social awareness, and responsible decision-making (Coelho & Marchante, 2018), they possibly use these competencies to reinforce their power, prestige, and social status in bullying interactions, thereby reducing the negative impact of engaging in bullying on their SEC (Samson et al., 2022).

Altogether, these results support the differential effect of SEL programs on students' SEC based on their role in bullying. Participation in the PAUMS SEL program led to greater increases in self-control and social awareness for victims and bully-victims compared to students not engaged in bullying. Moreover, victims showed benefits in responsible decision-making. However, students who bullied their peers did not show any benefits from participating in an SEL program. This is problematic because it would be expected that participation in an SEL program would lead to improvements in bullies' self-control, social awareness, and responsible decision-making, as higher levels of these competencies could potentially prevent bullies from continuing to engage in bullying behavior.

The differential effect on SEC found for different groups according to their bullying role has important clinical implications. The findings suggest that programs such as PAUMS SEL should be tailored to meet the specific needs of students involved in different bullying roles. For example, both **victims** and **bully-victims** may benefit from participation in programs that enhance self-control, social awareness, and decision-making skills to improve their social integration and emotional resilience. For bullies, however, it may be more beneficial to implement interventions that focus on promoting social perspective-taking based on empathy, enabling them to broaden their understanding and emotional resonance toward others. The differential gains observed in social and emotional competencies suggest the benefits of a greater focus on role-specific interventions rather than a whole-group intervention approach.

Limitations and Future Studies

The current study did not assess how students' mental health may have influenced the relationship between SEC with bullying behavior for those who were engaged in bullying interactions. As students' psychological adjustment has become particularly impacted by the drastic changes in their daily routines and the uncertainty related to the recent COVID-19 lockdowns (World Health Organization, 2022), this may have affected program results. Future studies should address these potential mediators.

Additionally, only a quantitative approach was used, whereas qualitative methodologies, such as interviews,

may be useful to further understand the differential impact of PAUMS regarding specific bullying roles, as the program has shown a more positive effect on victims and bully-victims, while it almost did not have a positively impact. Using a multi-informant approach, rather than relying solely on adolescents' perceptions, can also provide a more precise and comprehensive analysis of bullying behaviors and their effects on adolescents. The use of hetero-rating instruments could also help to control the potential social desirability bias associated with the measures focusing on socially desirable (i.e., SEC) and undesirable (i.e., bullying) behaviors, while providing a more comprehensive and ecological understanding of the target constructs of this study.

Furthermore, the generalizability of the findings is limited, as this study focused only on public middle schools. Future research should include adolescents attending both middle and high school, in private and public schools. As some students were unavailable to participate at all three time points, participant attrition may also be considered a limitation.

CONCLUSION

The current study provided relevant information about the importance of SEL program as an effective component of bullying prevention interventions. Participation in an SEL program appears to offer several benefits in the development of SEC for both victims and bully-victims. Furthermore, as several studies have indicated that these competencies can protect children from further engagement in bullying (Coelho & Marchante, 2021; Cook et al., 2010; Jenkins et al., 2016; Zych et al., 2019), these findings support the conclusion that SEL programs may be effective in bullying prevention interventions for these students, as suggested by Cook et al. (2010). However, in the current study, students who engaged in bullying showed similar outcomes to those who did not engage in these aggressive interactions. This lack of differential effectiveness of this SEL program for bullying perpetrators raises questions about the universality of the effects of SEL programs, as suggested by Mahoney et al. (2021). It also highlights the need to create or adapt programs to better address the development of these students' SEC, particularly in social awareness, as low levels are associated with more hostile and aggressive behavior (Coelho & Marchante, 2018; Jenkins et al., 2016), whereas heightened awareness of others' feelings promotes respectful treatment (van Noorden et al., 2015).

These results also highlight the need to articulate the promotional, preventive, and remedial aspects of the intervention to appropriately address the needs of adolescents

who tend to be more vulnerable to being involved in bullying roles due to both the social demands and challenges associated with the school context and the developmental characteristics of their developmental stage. Interventions that are primarily promotional (i.e., aimed at promoting SEL) may not be sufficient to help bullies develop more adaptive social skills and conflict resolution strategies. If behavioral problems, particularly aggression, are systematically used to cope with social interactions, then, there is a need to help them develop emotional regulation skills (e.g., anger management), rather than simply promoting the broader development of SEL.

DISCLOSURE

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REFERENCES

- Arseneault, L. L. (2017). The long-term impact of bullying victimization on mental health. *World Psychiatry*, 16(1), 27–28. <https://doi.org/10.1002/wps.20399>
- Arsenio, W. F., & Lemerise, E. A. (2001). Varieties of childhood bullying: Values, emotion processes, and social competence. *Social Development*, 10(1), 59–73. <https://doi.org/10.1111/1467-9507.00148>
- Bradshaw, C., Nguyen, A., Kane, J. C., & Bass, J. (2014). *Mental health matters: Social inclusion of youth with mental health conditions*. United Nations publications. <https://www.un.org/esa/socdev/documents/youth/youth-mental-health.pdf>
- Busch, V., Laninga-Wijnen, L., van Yperen, T. A., Schrijvers, A. J. P., & De Leeuw, J. R. J. (2015). Bidirectional longitudinal associations of perpetration and victimization of peer bullying with psychosocial problems in adolescents: A cross-lagged panel study. *School Psychology International*, 36(5), 532–549. <https://doi.org/10.1177/0143034315604018>
- Cao, J., Yuan, W., Xu, X., & Liu, X. (2024). Reciprocal links between friendship quality and peer victimization among middle adolescents. *Journal of Interpersonal Violence*, 39(9–10), 2127–2147. <https://doi.org/10.1177/08862605231218684>

- CASEL. (2020). *The CASEL guide to schoolwide social and emotional learning*. <https://schoolguide.casel.org/>
- Charlton, C., Rasbash, J., Browne, W. J., Healy, M., & Cameron, B. (2020). *MLwiN Version 3.05*. Centre for Multilevel Modelling, University of Bristol.
- Chui, W. H., & Chan, H. C. O. (2013). Association between self-control and school bullying behaviors among Macanese adolescents. *Child Abuse & Neglect*, 37(4), 237–242. <https://doi.org/10.1016/j.chiabu.2012.012.003>
- Cipriano, C., Strambler, M. J., Naples, L. H., Ha, C., Kirk, M., Wood, M., Sehgal, K., Zieher, A. K., Eveleigh, A., McCarthy, M., Funaro, M., Ponnock, A., Chow, J. C., & Durlak, J. (2023). The state of evidence for social and emotional learning: A contemporary meta-analysis of universal school-based SEL interventions. *Child Development*, 94(5), 1181–1204. <https://doi.org/10.1111/cdev.13968>
- Coelho, V., & Figueira, A. (2011). “Positive attitude”: Promoting school success through social and emotional abilities development. Design for elementary and middle school students, in Portugal. *Interamerican Journal of Psychology*, 45(2), 185–192.
- Coelho, V. A., & Marchante, M. (2018). Trajectories of social and emotional competencies according to cyberbullying roles. A longitudinal multilevel analysis. *Journal of Youth and Adolescence*, 47(9), 1952–1965. <https://doi.org/10.1007/s10964-018-0895-5>
- Coelho, V. A., & Marchante, M. (2021). A multilevel analysis of the influence of bullying participant roles upon the trajectories of adolescents’ social and emotional competencies. *School Psychology International*, 42(3), 306–323. <https://doi.org/10.1177/0143034321988972>
- Coelho, V. A., Marchante, M., & Brás, P. (2023). Positive attitude Upper Middle School social and emotional learning program: Influences of implementation quality on program outcome. *Frontiers in Psychology*, 14, 1172517. <https://doi.org/10.3389/fpsyg.2023.1172517>
- Coelho, V. A., Marchante, M., & Romão, A. R. (2019). Efeito da transição para o 2º ciclo sobre o envolvimento dos alunos em bullying. *International Journal of Developmental and Educational Psychology*. *Revista INFAD de Psicología*, 5(1), 135–144. <https://doi.org/10.17060/ijodaep.2019.n1.v5.1576>
- Coelho, V. A., Marchante, M., & Romão, A. R. (2022). Adolescents’ trajectories of social anxiety and social withdrawal: Are they influenced by traditional bullying and cyberbullying roles? *Contemporary Educational Psychology*, 69, 102053. <https://doi.org/10.1016/j.cedpsych.2022.102053>
- Coelho, V., Marchante, M., & Sousa, V. (2015). “Positive attitude”: A multilevel model analysis of the effectiveness of a social and emotional learning program for Portuguese middle school students. *Journal of Adolescence*, 43(1), 29–38. <https://doi.org/10.1016/j.adolescence.2015.05.009>
- Coelho, V. A., & Sousa, V. (2016). Desenvolvimento de um sistema de avaliação multi-informantes de competências socioemocionais. In A. M. Pinto & R. Raimundo (Eds.), *Avaliação e promoção de competências socioemocionais em Portugal* (pp. 135–154). Coisas de Ler.
- Coelho, V. A., & Sousa, V. (2020). Bullying and Cyberbullying Behaviors Questionnaire: Validation of a short form. *International Journal of School & Educational Psychology*, 8(1), 3–10. <https://doi.org/10.1080/21683603.2018.1522282>
- Coelho, V., Sousa, V., Raimundo, R., & Figueira, A. (2017). The impact of a Portuguese middle school social-emotional learning program. *Health Promotion International*, 32(2), 292–300. <https://doi.org/10.1093/heapro/dav064>
- Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, 25(2), 65–83. <https://doi.org/10.1037/a0020149>
- Di Stasio, M. R., Savage, R., & Burgos, G. (2016). Social comparison, competition and teacher-student relationships in junior high school classrooms predicts bullying and victimization. *Journal of Adolescence*, 53(1), 207–216. <https://doi.org/10.1016/j.adolescence.2016.10.002>
- Drubina, B., Kökönyei, G., Várnai, D., & Reinhardt, M. (2023). Online and school bullying roles: Are bully-victims more vulnerable in nonsuicidal self-injury and in psychological symptoms than bullies and victims? *BMC Psychiatry*, 23(1), 945. <https://doi.org/10.1186/s12888-023-05341-3>
- Greenberg, M. T. (2023). Evidence for social and emotional learning in schools. *Learning Policy Institute*. <https://doi.org/10.54300/928.269>
- Heck, R. H., Thomas, S. L., & Tabata, L. N. (2013). *Multilevel and longitudinal modeling with IBM SPSS* (2nd ed.). Routledge.
- Holt, M. K., Vivolo-Kantor, A. M., Polanin, J. R., Holland, K. M., DeGue, S., Matjasko, J. L., Wolfe, M., & Reid, G. (2015). Bullying and suicidal ideation and behaviors: A meta-analysis. *Pediatrics*, 135(2), e496–e509. <https://doi.org/10.1542/peds.2014-1864>
- Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. *The American Psychologist*, 70(4), 293–299. <https://doi.org/10.1037/a0038928>
- Hysing, M., Askeland, K. G., La Greca, A. M., Solberg, M. E., Breivik, K., & Sivertsen, B. (2021). Bullying involvement in adolescence: Implications for sleep, mental health, and academic outcomes. *Journal of Interpersonal Violence*, 36(17–18), NP8992–NP9014. <https://doi.org/10.1177/0886260519853409>
- Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jästad, A., Cosma, A., et al. (2020). *Spotlight on Adolescent Health and Well-Being. Findings From the 2017/2018 Health Behaviour in School-Aged Children (HBSC) Survey in Europe and Canada. International Report. Key Findings*, vol. 1. <https://apps.who.int/iris/bitstream/handle/10665/332091/9789289055000-eng.pdf>
- Jenkins, L. N., Demaray, M. K., Fredrick, S. S., & Summers, K. H. (2016). Associations among middle school students’ bullying roles and social skills. *Journal of School Violence*, 15(3), 259–278. <https://doi.org/10.1080/15388220.2014.986675>
- Källmén, H., & Hallgren, M. (2021). Bullying at school and mental health problems among adolescents: A repeated cross-sectional study. *Child and Adolescent Psychiatry and Mental Health*, 15(1), 74. <https://doi.org/10.1186/s13034-021-00425-y>
- Landstedt, E., & Persson, S. (2014). Bullying, cyberbullying, and mental health in young people. *Scandinavian Journal of Public Health*, 42(4), 393–399. <https://doi.org/10.1177/1403494814525004>
- Lereya, S. T., Copeland, W. E., Zammit, S., & Wolke, D. (2015). Bully/victims: A longitudinal, population-based cohort study of their mental health. *European Child & Adolescent Psychiatry*, 24(12), 1461–1471. <https://doi.org/10.1007/s00787-015-0705-5>
- Li, C., Wang, P., Martin-Moratinos, M., Bella-Fernández, M., & Blasco-Fontecilla, H. (2024). Traditional bullying and cyberbullying in the digital age and its associated mental health

- problems in children and adolescents: A meta-analysis. *European Child & Adolescent Psychiatry*, 33(9), 2895–2909. <https://doi.org/10.1007/s00787-022-02128-x>
- Mahoney, J. L., Weissberg, R. P., Greenberg, M. T., Dusenbury, L., Jagers, R. J., Niemi, K., Schlinger, M., Schlund, J., Shriver, T. P., VanAusdal, K., & Yoder, N. (2021). Systemic social and emotional learning: Promoting educational success for all preschool to high school students. *The American Psychologist*, 76(7), 1128–1142. <https://doi.org/10.1037/amp0000701>
- Moore, S. E., Norman, R. E., Sly, P. D., Whitehouse, A. J. O., Zubrick, S. R., & Scott, J. (2014). Adolescent peer aggression and its association with mental health and substance use in an Australian cohort. *Journal of Adolescence*, 37(1), 11–21. <https://doi.org/10.1016/j.adolescence.2013.10.006>
- Obermann, M. L. (2011). Moral disengagement among bystanders to school bullying. *Journal of School Violence*, 10(3), 239–257. <https://doi.org/10.1080/15388220.2011.578276>
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Blackwell Publishers.
- Ryoo, J. H., Wang, C., & Swearer, S. M. (2015). Examination of the change in latent statuses in bullying behaviors across time. *School Psychology Quarterly: The Official Journal of the Division of School Psychology, American Psychological Association*, 30(1), 105–122. <https://doi.org/10.1037/spq0000082>
- Salmivalli, C. (1999). Participant role approach to school bullying: Implications for intervention. *Journal of Adolescence*, 22(4), 453–459. <https://doi.org/10.1006/jado.1999.0239>
- Salmivalli, C. (2014). Participant roles in bullying: How can peer bystanders be utilized in interventions? *Theory into Practice*, 53(4), 286–292. <https://doi.org/10.1080/00405841.2014.947222>
- Samson, J. E., Delgado, M. A., Louis, D. F., & Ojanen, T. (2022). Bullying and social goal-setting in youth: A meta-analysis. *Social Development*, 31(4), 945–961. <https://doi.org/10.1111/sode.12595>
- Silvers, J. A. (2022). Adolescence as a pivotal period for emotion regulation development. *Current Opinion in Psychology*, 44, 258–263. <https://doi.org/10.1016/j.copsyc.2021.09.023>
- Smith, B. H., & Low, S. (2013). The role of social-emotional learning in bullying prevention efforts. *Theory into Practice*, 52(4), 280–287. <https://doi.org/10.1016/10.1080/00405841.2013.829731>
- Solberg, M. E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior*, 29(3), 239–268. <https://doi.org/10.1002/ab.10047>
- Sousa, M. L., Peixoto, M. M., & Cruz, S. (2023). The association of social skills and behaviour problems with bullying engagement in Portuguese adolescents: From aggression to victimization behaviours. *Current Psychology*, 42(14), 11936–11949. <https://doi.org/10.1007/s12144-021-02491-z>
- Strindberg, J., & Horton, P. (2022). Relations between school bullying, friendship processes, and school context. *Educational Research*, 64(2), 242–256. <https://doi.org/10.1080/00131881.2022.2067071>
- Strohmeier, D., Stefanek, E., & Yanagida, T. (2024). What works for whom? Evaluating patterns and mechanisms of change among bullies, victims, and bully-victims participating in a school-based prevention program. *International Journal of Bullying Prevention*, 6(3), 267–282. <https://doi.org/10.1007/s42380-023-00160-2>
- Sumter, S. R., Baumgartner, S. E., Valkenburg, P. M., & Peter, J. (2012). Developmental trajectories of peer victimization: Off-line and online experiences during adolescence. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 50(6), 607–613. <https://doi.org/10.1016/j.jadohealth.2011.10.251>
- 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>
- Thornberg, R., Wänström, L., Hong, J. S., & Espelage, D. L. (2017). Classroom relationship qualities and social-cognitive correlates of defending and passive bystanding in school bullying in Sweden: A multilevel analysis. *Journal of School Psychology*, 63, 49–62. <https://doi.org/10.1016/j.jsp.2017.03.002>
- UNESCO. (2019). *Behind the numbers: Ending school violence and bullying*. UNESCO. <https://www.unicef.org/media/66496/file/Behind-the-Numbers.pdf>
- van Noorden, T. H., Haselager, G. J., Cillessen, A. H., & 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>
- Weissberg, R. P., Durlak, J. A., Domitrovich, C. E., & Gullotta, T. P. (2015). Social and emotional learning: Past, present, and future. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, T. P. Gullotta, (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 3–19) Guilford Press.
- Wigelsworth, M., Mason, C., Verity, L., Qualter, P., & Humphrey, N. (2024). Making a case for core components: New frontiers in SEL theory, research, and practice. *School Psychology Review*, 53(5), 593–606. <https://doi.org/10.1080/2372966X.2021.2004863>
- World Health Organization. (2022). Mental health and COVID-19: Early evidence of the pandemic's impact. Scientific Brief, 1–11.
- Ye, Z., Wu, D., He, X., Ma, Q., Peng, J., Mao, G., Feng, L., & Tong, W. (2023). Meta-analysis of the relationship between bullying and depressive symptoms in children and adolescents. *BMC Psychiatry*, 23(1), 215. <https://doi.org/10.1186/s12888-023-04681-4>
- Zych, I., Beltrán-Catalán, M., Ortega-Ruiz, R., & Llorent, V. J. (2018). Social and emotional competencies in adolescents involved in different bullying and cyberbullying roles. *Revista Psicoeducativa*, 23(2), 86–93. <https://doi.org/10.1016/j.psicoe.2017.12.001>
- Zych, I., Farrington, D. P., & Ttofi, M. M. (2019). Protective factors against bullying and cyberbullying: A systematic review of meta-analyses. *Aggression and Violent Behavior*, 45, 4–19. <https://doi.org/10.1016/j.avb.2018.06.008>

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