

# Adolescent School Bullying and Life Skills: A Systematic Review of the Recent Literature

Catherine Potard, Céline Combes, Violaine Kubiszewski, Régis Pochon, Audrey Henry, Arnaud Roy

# ▶ To cite this version:

Catherine Potard, Céline Combes, Violaine Kubiszewski, Régis Pochon, Audrey Henry, et al.. Adolescent School Bullying and Life Skills: A Systematic Review of the Recent Literature. Violence and victims, 2021, 36 (5), pp.604-637. 10.1891/VV-D-19-00023. hal-03746941

HAL Id: hal-03746941

https://hal.science/hal-03746941

Submitted on 6 Aug 2022

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Adolescent School Bullying and Life Skills: A Systematic Review of the Recent Literature

Potard, C. a, Combes, C. a, Kubiszewski, V. b, Pochon, R. c, Henry, A. c, & Roy, A. a, d

Correspondence to:

### Dr Catherine POTARD

Laboratoire de Psychologie des Pays de la Loire, EA 4638

Maison de la Recherche Germaine Tillion

Université d'Angers,

5 bis, boulevard Lavoisier

49045 Angers Cedex 1, France

Tel.: +333241226394 E-mail: catherine.potard@univ-angers.fr

<sup>&</sup>lt;sup>a</sup> EA 4638 Psychology Laboratory of the Pays de la Loire, (LPPL), Department of Psychology, University of Angers, Angers, France. catherine.potard@univ-angers.fr; celine.combes@univ-angers.fr; arnaud.roy@univ-angers.fr

<sup>&</sup>lt;sup>b</sup> EA3188 Psychology Laboratory & FR EDUC, University of Bourgogne/Franche-Comté, Besançon, France. violaine.kubiszewski@univ-fcomte.fr

<sup>&</sup>lt;sup>c</sup> EA 6291 Cognition, Health and Society Laboratory (C2S), Department of Psychology, University of Reims Champagne-Ardenne, Reims, France. regis.pochon@univ-reims.fr; audrey.henry@univ-reims.fr

<sup>&</sup>lt;sup>d</sup> Reference Center for Learning Disabilities, Department of Pediatry, University Hospital of Nantes, France

## **Abstract**

The health consequences of being involved in bullying and cyberbullying are well described for adolescents, but many questions related to the role played by their life skills remain unanswered. Accordingly, this systematic review aims to provide a clear overview of research on the relationships between bullying involvement as a bully, victim, bully-victim or bystander, and adolescents' life skills. This article systematically reviewed 71 relevant empirical studies that met the inclusion criteria, extracted from the PubMed, PsycINFO, Scopus, Sage, Wiley and SpringerLink databases. Their main findings were categorized according to the three types of life skills described by the World Health Organization: decision-making/problem-solving skills, interpersonal and communication skills, and selfmanagement skills. Results showed relatively consensual outcomes for communication and interpersonal skills (empathy, moral disengagement) and skills for managing stress (coping strategies). Other decision-making or interpersonal skills, such as executive function or theory of mind, were poorly explored, and require further research, if we are to understand how life skills may be involved in bullying. Taken together, our findings highlight methodological heterogeneity and measurement problems in bullying studies that make their results difficult to interpret. Recommendations for prevention/education health researchers and professionals are provided, emphasizing the importance of considering the sociocognitive development of adolescents in bullying prevention.

*Keywords:* life skills, bullying, adolescence, executive function, social cognition, moral disengagement, empathy, coping, systematic review

Adolescent School Bullying and Life Skills: A Systematic Review of the Recent Literature

# 1. School Bullying: A Triadic Process

School bullying is a concerning and pervasive problem experienced by adolescents that is recognized as a major, international public health problem (Bauman, Toomey, & Walker, 2013; Gini & Pozzoli, 2009; Takizawa, Maughan, & Arseneault, 2014; Wolke & Lereya, 2015). Although prevalence of victimization varies throughout the period of adolescence and across studies, the estimated percent of students bullied in the past two or three months ranged from 10 to 25% in many countries and regions (Chester et al., 2015; Craig et al., 2009; Due et al., 2005; Zych, Farrington, Llorent, & Ttofi, 2017). In 2014, a meta-analysis on 80 studies (Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014) showed that 35% of adolescents reported that they had been involved in bullying as bullies, as victims or both, with a lower percentage for north-western Europe than for eastern European (Craig et al., 2009; Tsitsika et al., 2014). Moreover, a recent study shows that the prevalence of bullying involvement in the last six months among adolescents was estimated at 13-20% for victims-only, 5-7% for bully-victims and 3-12% for bullies only (Guy, Lee, & Wolke, 2019). Concerning cyberbullying, prevalence was around 23% for victimization and 15% for aggression (e.g., Hamm et al., 2015).

Although definitions of bullying vary across studies and according to authors (Hymel & Swearer, 2015), there is a general consensus that bullying characterizes a specific type of aggression between peers with three behavioral characteristics: (*i*) intention to deliberately harm or hurt, (*ii*) repetitive acts over time, and (*iii*) power imbalance between the bully and the bullied. Therefore, bullying is an abuse of power that occurs repeatedly over time, against a less powerful victim (Craig & Pepler, 2003; Juvonen & Graham, 2014; Olweus, 1994, 1995, 2006; Rigby, 2004). Olweus (Olweus, 1995; Olweus & Limber, 2010) adds that the victims feel vulnerably exposed to the perpetrators (i.e., they cannot effectively defend themselves;

see Lamb, Pepler, & Craig, 2009; Thomas, Connor, & Scott, 2015). Bullying includes various aggressive behaviors that are most often categorized as either direct, in the form of face-to-face verbal (e.g., name calling, threatening, teasing, harassment) and physical (e.g., pushing, kicking, hitting) acts, or indirect, in the form of relational/social forms of aggression, (e.g., social exclusion, ostracism or gossiping) (Bradshaw, Waasdorp, & Johnson, 2015; Crick & Grotpeter, 1996; Thomas et al., 2015). Within these indirect forms, the increasing use of information and communication technologies (ICTs) has led to a new method of peer bullying: cyberbullying (Dooley, Pyżalski, & Cross, 2009; Garett, Lord, & Young, 2016; Kiriakidis & Kavoura, 2010; Kowalski, Giumetti, Schroeder, & Lattanner, 2014; Slonje & Smith, 2008).

It is also customary to differentiate between different types of involvement in bullying. Prior studies divided pupils involved in bullying into two groups: bullied (victims) or bullies (perpetrators or aggressors). Although numerous studies are still based on this dichotomy, current research indicates the existence of two other major groups: bully-victims (who are bullied but also bully; Haynie et al., 2001; Lereya, Copeland, Zammit, & Wolke, 2015; Veenstra et al., 2005) and bystanders (Twemlow & Sacco, 2013). Although they are not directly involved in the bullying, bystanders play an essential role in its social dynamic/process (Hong & Espelage, 2012; Salmivalli, Lagerspetz, Björkqvist, Osterman, & Kaukiainen, 1996), by reinforcing or decreasing aggressive behaviors. Regarding bystanders, more than 80% of pupils have witnessed a bullying episode, but only 20% on average intervene (Hawkins, Pepler, & Craig, 2001; Thornberg et al., 2012). Previous studies have identified three or four different roles of the bystander (e.g., Gini, Albiero, Benelli, & Altoè, 2008; Lucas-Molina, Williamson, Pulido, & Calderón, 2014; Salmivalli et al., 1996; Sutton & Smith, 1999): (i) followers (also called *pro-bullies*) support or reinforce the bully's actions through encouragement and/or mockery about the victim; (ii) outsiders (passive response)

attempt to keep away from any and all altercations (e.g., witness or withdrawal); And (*iii*) defenders support the victim by ending the bullying (e.g., confrontation of the bully or seeking help) or by caring for and bonding with the victim (e.g., emotional support, advice).

# 2. School Bullying in Adolescence and Mental Health

A well-established body of research has extensively described the negative impact of bullying in both its face-to-face and online forms (e.g., Hase, Golberg, Smith, Stuck, & Campain, 2015; Hawker & Boulton, 2000; Nixon, 2014) on victims, perpetrators and bystanders. The negative outcomes of traditional and cyberbullying are reflected in academic performance (e.g., Kowalski & Limber, 2013; Schneider, O'Donnell, Stueve, & Coulter, 2012), anxious and depressive disorders (e.g., Schneider et al., 2012; Turner, Exum, Brame, & Holt, 2013), suicide (see van Geel, Vedder, & Tanilon, 2014), substance use (e.g., Lambe & Craig, 2017; Radliff, Wheaton, Robinson, & Morris, 2012), and self-esteem (Patchin & Hinduja, 2010; Seals & Young, 2003). Substantial research has also identified links between bullying perpetration and externalizing problems (Ttofi, Bowes, Farrington, & Lösel, 2014) such as emotional dysregulation (e.g., anger, Camodeca & Goossens, 2004) or conduct problems (Ragatz, Anderson, Fremouw, & Schwartz, 2011). There also seems to be a risk of mental health problems among bystanders (Rivers, Poteat, Noret, & Ashurst, 2009). Moreover, it should be noted that these negative psychological correlates tend to persist into adulthood (Lereya, Copeland, Costello, & Wolke, 2015; Sigurdson, Wallander, & Sund, 2014). These results demonstrate that both the perpetrators and the recipients of peer aggression experience psychological difficulties, whatever the form of bullying (Hawker & Boulton, 2000; Reijntjes, Kamphuis, Prinzie, & Telch, 2010; Sourander et al., 2010).

### 3. Life Skills of Adolescents Involved in School Bullying

Given the well documented negative consequences, over the past decade, researchers have begun to examine how personal skills or abilities may impact involvement in bullying.

The identification of intrinsic vulnerabilities or protective factors is central for developing prevention and counseling strategies. According to empowerment philosophy, adolescents are considered to be capable of effectively coping with the challenges of life using their available life skills.

The World Health Organization (WHO) defines life skills as "abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life" (WHO, 1997, 2003). In short, life skills are essentially abilities that promote mental wellbeing and positive social relationships. This definition indicates that life skills can refer to both psychosocial competencies (e.g., decision making, problem solving, evaluating future consequences, managing emotions and stress) and communication and interpersonal skills (e.g., engaging in verbal/nonverbal communication, giving feedback without blame and with empathy). There have been numerous attempts to categorize these key skills. The most widely recognized classification establishes three broad categories of skills that are mainly interrelated, complementing and reinforcing each other (WHO, 2003): (i) decision-making skills, (ii) interpersonal and communication skills, and (iii) self-management skills. The choice of (and emphasis on) different skills varies according to the context and needs to be adapted and defined according to the health topic. For example, decision making can be targeted when promoting sexual health (e.g., condom use), whereas communication skills may be more important for preventing violence. Therefore, improving adolescents' life skills is key to reducing ineffective interpersonal relationships with peers.

# 3.1 Decision-making/problem-solving skills: Executive functions

Decision-making skills, including problem-solving, are described as being central to interpersonal relationships, social regulation and impulse control, and are widely supported by executive functioning. Often used as "an umbrella term", *executive functions* (EFs) refer to the high-level, interrelated abilities required for purposeful goal-directed behavior (Davidson,

Amso, Anderson, & Diamond, 2006; Goldstein, Naglieri, Princiotta, & Otero, 2014; Miyake & Friedman, 2012). They include attention control (and action inhibition), working memory, cognitive flexibility (shifting), and goal setting (planning, initiation, and problem solving). EFs are especially challenged in unfamiliar settings such as social situations. Different aspects of EFs, controlled by the frontal regions of the brain (i.e., particularly the prefrontal cortex; Alvarez & Emory, 2006), have recently been identified as having an influence on other cognitive domains, mental health, and behavior self-regulation (Allan, McMinn, & Daly, 2016; Black, Semple, Pokhrel, & Grenard, 2011; McKown, Gumbiner, Russo, & Lipton, 2009). These multidimensional neurocognitive abilities have been linked to proactive aggression (Morgan & Lilienfeld, 2000; Ogilvie, Stewart, Chan, & Shum, 2011) and prosocial behavior (e.g., defender, not involved; Riggs, Jahromi, Razza, Dillworth-Bart, & Mueller, 2006), but still need to be studied in the specific context of bullying.

There is also considerable evidence that these high-level cognitive abilities are not mature in adolescence and continue to develop into young adulthood (Best & Miller, 2010; Blakemore & Choudhury, 2006). Other results underline the possibility that cold EFs (i.e., cognitive skills such as strategic planning, problem solving, working memory and cognitive flexibility) and hot EFs (i.e., empathy, emotional regulation, affective decision making) may develop somewhat independently during the transition to adolescence (Prencipe et al., 2011; Zelazo & Carlson, 2012). As a result, it is important to better understand the connections between bullying involvement and adolescents' EFs, especially as recent studies in early childhood have shown an association between peer problems and poor EFs (Coolidge, DenBoer, & Segal, 2004; Holmes, Kim-Spoon, & Deater-Deckard, 2016; Verlinden et al., 2014). Poor EFs are also predictive of poor Theory of Mind (Hughes & Ensor, 2007).

3.2 Interpersonal and communication skills: Theory of mind, empathy and moral disengagement

Interpersonal and communication skills for communicating and interacting effectively with peers (e.g., giving blame-free feedback, empathizing, and considering others' viewpoints and emotions) encompass social cognition constructs such as empathy, theory of mind (ToM) and moral disengagement (Frith & Frith, 2008). Both empathy (the ability to share in, and make inferences about, another person's emotional state) and ToM (a form of perspectivetaking that entails understanding self and others' mental states) are involved in many interpersonal interactions (Kanske, Böckler, & Singer, 2015). In this sense, ToM refers to a social cognitive ability to attribute other people's beliefs, intentions, or feelings in order to explain and predict behaviors (Decety, 2005; Fodor, 1992). Impairment of this skill reduces social understanding and social functioning (Capage & Watson, 2001; Jenkins & Astington, 2000) and peer popularity (Slaughter, Imuta, Peterson, & Henry, 2015). ToM can be divided into cognitive ToM (relative to beliefs, intentions, and desires) and affective ToM (relative to emotional states and feelings), and we can also distinguish between first- ("I think that you think"), second- ("I think that you think that he/she thinks") and third ("I think that you think that he/she thinks that another person thinks") order ToM (in terms of complexity). Some studies investigating ToM and bullying among children and preadolescents have found good ToM abilities among defenders and lower abilities among bullies (in comparison with noninvolved individuals; see Smith, 2017). However, it not yet clear whether these findings are also observed in adolescents. It should be noted that other authors do not support this social skill deficit hypothesis. For example, Sutton and Smith (1999) argued that some child bullies actually use their social cognition skills to manipulate and damage others. Nevertheless, considering the late acquisition of ToM in childhood, some of these results cannot be extended to the specific context of adolescence, especially since adolescence has been recognized as a critical period in the development of ToM (Dumontheil, Apperly, & Blakemore, 2010; Steinberg, 2005; Vetter, Altgassen, Phillips, Mahy, & Kliegel, 2013).

Another dimension of social cognition, *empathy*, plays a major role in interpersonal and communication skills. Empathy underpins everyday peer socialization, which is crucial for the development and maintenance of affective bonds between partners and larger social groups (Gleason, Jensen-Campbell, & Ickes, 2009). As a fundamental social skill, empathy refers to an individual's ability to share other people's emotional states (see Cuff, Brown, Taylor, & Howat, 2016). It has long been viewed as a multifaceted concept, with a distinction being made between cognitive empathy (i.e., abilities to adopt another person's perspective) and affective empathy (i.e., ability to share another person's emotional state; Jolliffe & Farrington, 2006; Shamay-Tsoory, Aharon-Peretz, & Perry, 2009). Empathy is considered to be a fundamental aspect of prosocial and interpersonal behaviors among both children (e.g., Williams, O'Driscoll, & Moore, 2014) and adolescents (e.g., Sahdra, Ciarrochi, Parker, Marshall, & Heaven, 2015). Many anti-bullying interventions have focused on empathy (e.g., Stanbury, Bruce, Jain, & Stellern, 2009), but have proved to be of limited effectiveness, and no distinction has been made between affective and cognitive empathy (Ttofi & Farrington, 2011). A previous systematic review (van Noorden, Haselager, Cillessen, & Bukowski, 2015) concerning young people (aged 3-20 years) concluded that victimization is associated with lower levels of cognitive empathy, and defending with higher levels of both types of empathy. However, this review did not differentiate between children, adolescents and young adults, and thus did not consider the specificities of sociocognitive and socio-affective development in adolescence (Crone & Dahl, 2012).

Other major characteristics of interpersonal and communication skills are the sense of responsibility (Such & Walker, 2004) and moral competence (Ma, 2012), namely, personal judgments of moral/conventional transgressions relative to both prosocial behaviors and systematic peer-to-peer abuse. *Moral disengagement* was described by Bandura (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) as the tendency to harm others without having a

bad conscience, self-recrimination or guilt (i.e., to disengage from our moral responsibilities including moral standards and moral reasoning). Bandura characterized four broad categories of moral disengagement: (i) cognitive restructuring (with moral justification, advantageous comparisons or euphemistic labeling); (ii) displacement of personal responsibility; (iii) distortion of the consequences of the behavior; and (iv) dehumanization (or blaming) of the victim. A recent meta-analysis among children and youth (Gini, Pozzoli, & Hymel, 2014) revealed that moral disengagement is significantly associated with aggressive behaviors, including bullying. Furthermore, cyberbullies exhibit higher moral disengagement than traditional bullies (Slonje, Smith, & Frisén, 2012). In a sample of child and adolescent bystanders, defenders seemed to have lower moral disengagement scores (Almeida, Correia, & Marinho, 2009). One crucial finding of Gini et al. (2014)'s meta-analysis was that the links between moral disengagement and aggression are stronger in adolescents than in children, thus underscoring the need for a specific and thorough review of studies focusing exclusively on adolescents.

# 3.3 Self-management skills: Coping with emotion and stress

Self-management skills are related to coping skills for managing one's emotions (e.g., recognizing emotions, and being able to respond to them) and stress (dealing with stressful and challenging situations). First, managing/coping with emotions emphasizes the role of emotional evaluation, expression and recognition for using adapted and effective social strategies in peer relationships. Adolescents' ability to identify and understand emotions (their own and those of others) is critical for social adjustment and interpersonal relationships (Ciarrochi, Heaven, & Supavadeeprasit, 2008; Rowsell, Ciarrochi, Heaven, & Deane, 2014). An association between poor emotional understanding (e.g., emotion perception accuracy and emotion perception bias) and aggressive behaviors has been well documented among children (e.g., Blair & Coles, 2000; Denham et al., 2002), especially for boys. Results on bullying

among primary-school children all point to a reduced ability to recognize emotions, especially those of anger and fear in victims (physical or relational; e.g., Woods, Wolke, Nowicki, & Hall, 2009). As adolescence is a crucial developmental period, characterized by an increase in cognitive-emotional abilities (Herba & Phillips, 2004), the links between these abilities and bullying need to be addressed.

Second, skills for managing/coping with stress emphasize the role of individual strategies/resources in adapting to stressful situations (e.g., being directly or indirectly involved in bullying). *Coping with stress* (Folkman, 2013; Folkman, Lazarus, Gruen, & DeLongis, 1986) refers to the cognitive and behavioral strategies employed, with varying degrees of success or effectiveness, to minimize, stop, or withstand the emotional or situational impact of a stressful event.

A coping strategy is labelled as *adaptive* when detrimental effects are reduced, such as by asking a friend for advice or seeking help from an adult (Kanetsuna, Smith, & Morita, 2006; Moritz et al., 2016). By contrast, a *maladaptive* coping strategy leads to emotional/behavioral difficulties, such as passive avoidance, rumination or diversion (Cronqvist, Klang, & Björvell, 1997; Suls & Fletcher, 1985). Coping with bullying is classically divided into *problem-focused strategies* (i.e., to solve or remove the problem, also referred to as *approach coping*) and *emotion-focused strategies* (i.e., to minimize or reduce distress, also referred to as *avoidance coping*; Baker & Berenbaum, 2007; Wrzesniewski & Chylinska, 2007). Most investigations targeting children who are victims of bullying have shown that both traditional victims and cybervictims tend to cope ineffectively with bullying situations, exhibiting emotionally oriented and avoidant coping styles (Andreou, 2001; Hunter & Boyle, 2004). Specific coping strategies used by adolescents involved in bullying should be specified with regard to stress perception and coping modification during adolescence (Seiffge-Krenke, Aunola, & Nurmi, 2009).

### 4. Aim of the Present Review

Few studies have focused on the associations between adolescents' life skills and involvement in peer harassment. Studies of bullying have largely focused on the elementary and early secondary school period-a preadolescent period during which bullying behaviors increase (Finkelhor, Turner, Shattuck, & Hamby, 2013, 2015). Evidence shows that school bullying persists across the secondary-school years (Finkelhor et al., 2015; Griffin Smith & Gross, 2006; Skrzypiec, Askell-Williams, Slee, & Lawson, 2018), with both the common form of face-to-face bullying (especially among 12- to 13-year-olds) and online forms (with 12- to 15-year-old adolescents being more involved in cyberbullying; Eslea & Rees, 2001; Ryoo, Wang, & Swearer, 2015).

Moreover, the majority of studies (empirical and meta-analyses) that included both preteens and adolescents failed to consider either the stages of neurocognitive development (Spear, 2013) or the influence of peer group and socialization processes during adolescence (Brown, 2013). Furthermore, peer relationships become more sophisticated in adolescence, and life skills are at the heart of peer interactions (Blakemore, 2012). Adolescence is a critical period for building skills and developing positive habits with peers.

Although more and more skills-based health education programs are being implemented to some effect (e.g., Botvin & Griffin, 2003), the precise nature of the skills that are addressed remains undefined, and little is known about the theoretical underpinnings of building and developing life skills (e.g., EFs, social cognition, coping). It is therefore essential to identify which life skills could be effective in preventing bullying and how (Nasheeda, Abdullah, Krauss, & Ahmed, 2019).

In the light of the above, the aims of the present systematic review were to (*i*) gain a comprehensive overview of the associations between three life skills previously described in adolescents, namely decision-making/problem-solving skills based on EFs, interpersonal and

communication skills related to social cognition (i.e., ToM, empathy, and moral disengagement), and self-management skills (with coping strategies to manage stress or emotions), and bullying behaviors in youth aged 12-18 years, (*ii*) explore the nature of these associations according to role behaviors (bully, victim, bully-victim and bystander), and (*iii*) identify possible gaps in the present literature and directions for future research and interventions.

# Method of systematic review

# 1. Literature Search Strategy

In accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher, Liberati, Tetzlaff, Altman, & PRISMA Group, 2009), the literature search followed a three-step process to identify relevant studies. First, the identification of suitable electronic databases led us to query the PsychArticles, PsychInfo, Scopus, PubMed, Sage, Science Direct, Springerlink and Wiley databases. Searches were conducted using the following terms (and their variations; e.g., "bull\*"): "school bullying", "bullying", "bullied", "bully", "peer harassment", "peer intimidation", "peer victimization", "peer aggression", "bystander" AND "adolescent", for the period of January 2010 to September 2020. As this systematic review was intended to examine life skills associated with bullying involvement, these keywords were used in conjunction with the following terms: "empathy", "social cognition", "theory of mind", "executive function", "moral disengagement", "coping", "behavioral adjustment", and "appraisal". An additional search was conducted on the basis of the three categories of life skills established by the WHO, using the terms "decision-making", "problem-solving", "interpersonal skills" and "communication skills" or "self-management" and "bullying", and "adolescent". Search areas comprised the title, abstract, keywords, and topic. This first step yielded 177 articles, 48 duplicates, and 133 references. Searches were completed on September 28, 2020. Second, we examined the

resulting list of articles in order to select the relevant studies. Full-text article screening resulted in the identification of 105 potentially relevant articles. These were retrieved and reviewed for eligibility. A total of 71 publications met the inclusion criteria. Third, the bibliographies of all 71 selected articles were screened to identify potential additional studies. Articles that met all the inclusion criteria were retrieved and examined.

### 2. Inclusion and Exclusion Criteria

Studies were included in the review if they met the following criteria:

- Full-text papers published in peer-reviewed journals between January 2010 and September 2020;
- English-language publications or publications with an abstract in English;
- Studies with adolescent participants aged 12-18 years;
- Manuscripts with reported outcomes relevant to adolescents' life skills (i.e., no consequences of bullying exposure, no interventional studies);
- Studies based on empirical, quantitative data, and containing measures and descriptions of statistical methods;

Only quantitative studies (original articles and short papers) were included. Review articles, unpublished articles, case studies and other qualitative research, dissertations, conference proceedings papers, books and book chapters were excluded from the review.

Nevertheless, qualitative studies and meta-analyses were reviewed and used to provide further background and context.

### 3. Data Extraction

Data extracted included publication details, the country where the study was conducted, methodological characteristics such as sample size, percentage of girls, type of population, age range and/or grade level targeted, study design, and type of bullying measured. Information about the measurement strategy (youth self-report, peer nomination,

tools) and the measures used to rate victimization, perpetration, or bystander experiences was also reported. Data pertaining to studies meeting the inclusion criteria were used for basic descriptive statistics. Furthermore, several studies provided odds ratios or effect sizes. The articles were grouped according to three specific types of life skills: (*i*) EFs, (*ii*) ToM, empathy and moral disengagement, and (*iii*) coping strategies (related to emotion and stress).

### **Results**

# 1. Descriptive Results of Studies

The 71 published papers we reviewed, mostly concerned studies conducted in Europe (45.1%, n = 32), followed by the United States (16.9%, n = 12), and Australia (11.3%, n = 8). These studies mostly featured a cross-sectional design (84.3%, n = 59) and assessed variables using self-report questionnaires (88.7%, n = 63). Sample sizes ranged from 68 adolescents to 9512. Two studies (3.9%) focused on clinical samples. Table 1 details the key characteristics of these studies.

Please insert Table 1 about here					

Nearly one third of the studies failed to use a validated tool to evaluate bullying (45.1%, n = 32). The most frequently used validated self-reports for measuring bullying were the Olweus Bully/Victim Questionnaire (28.1%, n = 9), Participant Role Questionnaire (19.3%, n = 6,), and Bully Participant Behavior Questionnaire (16.1%, n = 5).

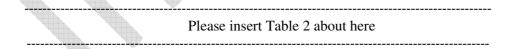
# 2. Decision-Making/Problem-Solving Skills: Executive Functions

We begin by addressing the key results for decision-making and problem-solving skills, which are primarily supported by EFs. Table 2 provides a summary of the five studies that focused on this topic, including demographic information and the major findings. Studies investigating the relationships between EFs and bullying (n = 5, with 1 longitudinal study) mainly used ecological measures, such as CEFI (n = 1) and BRIEF (n = 3). One study (Liu,

Cao, Li, Lou, & Lavebratt, 2016) that focused on dysexecutive syndrome found that adolescents in this group were more likely to be bullied. With respect to victimization, studies tended to be homogenous, with a link between lower EF abilities and victimization (Crowley, Harvey-Knowles, & Riggs, 2016; Holmes et al., 2016; Kloosterman, Kelley, Parker, & Craig, 2014). Only one study (Jenkins, Demaray, & Tennant, 2017) considered aggression. This highlighted a significant association between perpetration and low levels of inhibitory control and emotion regulation. The same study found no significant relationship between EFs and bystander roles.

# 3. Interpersonal and Communication Skills: Theory of Mind, Empathy and Moral Disengagement

The question of an association between ToM and bullying among adolescents was only addressed in two studies, one cross-sectional (Espelage, Hong, Kim, & Nan, 2018) the other longitudinal (Shakoor et al., 2012). Despite the difference in design, both studies reported nonsignificant relationships between ToM and bullying. The relative risk ratio of (slightly) below 1 meant that the authors could not conclude with certainty that high or low ToM abilities at 5 years increase the risk (or protect against) involvement in school bullying in adolescence (see Table 2 for more details).



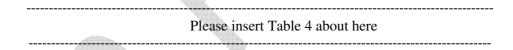
Studies of empathy (n = 23) mostly used self-report measures, applying the Basic Empathy Scale. The main finding about victimization was a lack of empathy (overall score), with inconsistant findings when a distinction was made between the cognitive and affective components of empathy (Antoniadou, Kokkinos, & Fanti, 2019; Walters & Espelage, 2019). In one recent study among adolescents from the Peruvian Amazonia, bullying and cyberbullying victimization were found to be positively related to both affective and cognitive

empathy (Martínez, Rodríguez-Hidalgo, & Zych, 2020). Lower levels of empathy were also strongly related to aggression (overall score), regardless of bullying modality (traditional or cyber; e.g., Antoniadou et al., 2019; Chan & Wong, 2019). Studies distinguishing between cognitive and affective empathy consistently highlighted an emotional empathy deficit among perpetrators (e.g., Ryzin & Roseth, 2019; Zych, Ttofi, & Farrington, 2019), but most failed to find a significant association with cognitive empathy (except for Antoniadou, et al., 2019). Eight studies (Caravita, Gini, & Pozzoli, 2012; Haddock & Jimerson, 2017; Jenkins et al., 2017; Machackova & Pfetsch, 2016; Schultze-Krumbholz, Zagorscak, Hess, & Scheithauer, 2020; Yang & Kim, 2017; Walters & Espelage, 2019) investigated bystander roles, showing a strong relation between defending and affective empathy. Two studies failed to find a relation between defending and cognitive empathy (Caravita et al., 2012; Walters & Espelage, 2019). By contrast, followers and outsiders scored lower on empathy (overall score and affective empathy subscore), and one study found no association at all in a cyberbullying context (Machackova & Pfetsch, 2016). Table 3 gives an overview of the main results.

	Please insert Tabl	e 3 about here	
	i icase ilisert i abi	c 3 about fiere	

Twenty-seven studies, including 19 cross-sectional ones, focused on moral disengagement (see Table 4). The Mechanism of Moral Disengagement Scale (Bandura, et al., 1996) was used in most cases. Significant correlations were found between victimization and moral disengagement (overall score), but only for self-report measures of traditional bullying (Caravita et al., 2012; Georgiou, Charalambous, & Stavrinides, 2020; Obermann, 2011, 2013; Pornari & Wood, 2010; Robson & Witenberg, 2013; Runions et al., 2019; Tognetta, Martinez, & Da Fonseca, 2016; Zych & Llorent, 2019) and cyber-bullying (Gao et al., 2020). One recent study failed to find a significant correlation between victimization and moral disengagement (Gini, Thornberg, & Pozzoli, 2020). Major findings on aggression were

convergent, showing a strong association between moral disengagement and bullying, both traditional and cyber, in self-report and peer-nominated surveys (Barchia & Bussey, 2011; Brighi et al., 2019; Georgiou et al., 2019; Gini, et al., 2020; Mazzone & Camodeca, 2019; Obermann, 2011, 2013; Robson & Witenberg, 2013; Runions et al., 2019; Teng, Bear, Yang, Nie, & Guo, 2020; Thornberg et al., 2012; Tognetta et al., 2016; Wachs, 2012; Wang, Yang, et al., 2020; Wang, Zhao, et al., 2020). In terms of mechanisms, moral justification, euphemistic labeling, displacement of responsibility, diffusion of responsibility, and distorting the consequences were most frequently associated with the perpetration of traditional bullying. For mechanisms in cyberbullying, results were less clearcut (Pornari & Wood, 2010; Renati, Berrone, & Zanetti, 2012; Robson & Witenberg, 2013). Finally, bystander roles were also associated with moral disengagement scores, with lower scores for defenders and higher scores for outsiders and probullies (Bjärehed et al., 2020; Bussey, Luo et al., 2020; Caravita et al., 2012; Levasseur, Desbiens, & Bowen, 2017; Mazzone & Camodeca, 2019; Thornberg & Jungert, 2013; Tognetta et al., 2016; von Grundherr, Geisler, Stoiber, & Schäfer, 2017).



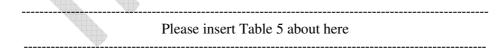
# 4. Self-Management Skills: Coping with Emotion and Stress

The characteristics of the 16 studies that measured self-management are summarized in Table 5. Two results emerged from our analysis of the five studies (one longitudinal) of coping with emotions (Ciucci, Baroncelli, & Nowicki, 2014; Gül et al., 2019; Herts, McLaughlin, & Hatzenbuehler, 2012; Lomas, Stough, Hansen, & Downey, 2012; Pozzoli, Gini, & Altoè, 2017). First, victimization was significantly associated with difficulty perceiving negative emotions such as fear, sadness and anger, especially among male cyberbullying victims. Cyberbully-victims also tended to have greater difficulty with impulse control than pure cybervictims, whereas the latter were more lacking in emotional awareness

(Gül et al., 2019). The perpetration of bullying was associated with difficulties in the recognition of fear, especially for boys. Second, coping with emotions among the victims of bullying was characterized by cognitive and control difficulties relative to negative emotions. Results concerning aggression were less convergent, with one study highlighting links with negative emotion regulation (e.g., fear, anger; Herts et al., 2012), and another study finding no such link (Lomas et al., 2012).

Regarding skills for managing stress, we found 11 articles that used a range of self-report coping scales. Table 5 sets out the descriptive characteristics of these studies.

Convergent results showed links between victimization and both self- or emotional-focused (e.g., self-blame, internalizing, acceptance, rumination, avoidance) coping strategies, and social coping strategies (Chan & Wong, 2017; Deniz & Ersoy, 2016; Garnefski & Kraaj, 2014; Keith, 2018; Ma & Chan, 2020; Murray-Harvey, Skrzypiec, & Slee, 2012; Parris et al., 2019; Rémond, Kern, & Romo, 2015; Singh & Bussey, 2011; Skrzypiec, Slee, Murray-Harvey, & Pereira, 2011). Externalizing strategies were also used by victims (Ma & Chan, 2020; Parris et al., 2019). Only one study looked for an association between aggression and coping (Parris et al., 2019) with significant results for self-reliance, externalizing, distancing and self-blame startegies. None of the studies explored bystander roles and coping strategies among adolescents.



### **Discussion**

This study was intended to provide an overview of recent empirical research exploring the life skills involved in adolescents' bullying behaviors. The major goal of this exercise was to review, consolidate and reinforce the relevant literature, in order to achieve a more precise

understanding of (i) the life skills linked to bullying behaviors in adolescence, and (ii) the limitations of current research and the options for addressing these limitations.

# 1. Main Findings

### 1.1 Decision-making/problem-solving skills

We focused here on the EFs that can set children on the developmental path to bullying. Surprisingly, while researchers have established both early and longlasting prefrontal development in adolescence (Romine & Reynolds, 2005), and its links to externalizing behaviors (e.g., Clark, Prior, & Kinsella, 2002), few empirical studies have looked at the possible links to bullying (Crowley et al., 2016; Holmes et al., 2016; Jenkins et al., 2017; Kloosterman et al., 2014; Liu et al., 2016). It should be added three of the five studies we reviewed focused solely on school bullying victimization (Holmes et al., 2016; Kloosterman et al., 2014; Liu et al., 2016). Adolescents who are bullied tend to exhibit poorer EFs. Furthermore, adolescents diagnosed with dysexecutive syndrome exhibit greater peer victimization than controls (Liu et al., 2016). These initial results are interesting, and further studies will be required to replicate these relationships, and to clarify which EFs are involved in bullying victimization. Furthermore, one question remains: do victims initially have poorer EFs or does victimization lead to EF deskilling? Longitudinal studies are needed to resolve this issue. Regarding bullying perpetration, one study highlighted a link between low EFs (specifically inhibitory control and emotional regulation; Jenkins et al., 2017) and the level of bullying. Unfortunately, three of the studies we reviewed (Crowley et al., 2016; Holmes et al., 2016; Kloosterman et al., 2014) only reported an overall EF score, and specific outcomes in terms of EF components (i.e., EFs as distinct abilities) were only provided by Jenkins et al. (2017). Even though we cannot reach firm conclusions on the basis of a single study, this tends to strengthen the hypothesis that aggression reflects a self-regulation failure or deficit (Denson, DeWall, & Finkel, 2012). In addition, this result should be considered in

conjunction with Raaijmakers et al.'s (2008) study in preschool, which demonstrated that preschoolers with aggressive behavior have impaired inhibition (as measured by the Go/No go task). However, this study did not consider emotion regulation, as it is not always regarded as an EF (Baggetta & Alexander, 2016). Finally, one study (Jenkins et al., 2017) considered witnesses of bullying and EF skills but failed to find any significant association between the two. The involvement of higher-order cognitive processes such as EFs in peer harassment should be examined further, considering both forms of bullying (traditional and cyber) and different ways of assessing EFs (ecological and performance measures). Another limitation concerns the use of self-report measures despite the fact that adolescents with dysexecutive syndrome tend to have difficulty self-evaluating (e.g., problems with self-perception and metacognition). Additional parent and/or teacher ratings of the behavioral and cognitive executive problems experienced by youth would be more efficient. Future studies will have to investigate the relationships between EFs and bystander roles in a school bullying context.

# 1.2 Interpersonal and communication skills

ToM and empathy are essential for social and peer interactions. In the developmental context of adolescence, only two studies have so far investigated ToM skills and their involvement in bullying (Espelage et al., 2018; Shakoor et al., 2012). Although methodologically very dissimilar, neither study found a tangible link between the two. These initial results challenge the notion that child bullies have poorer ToM (Smith, 2017). Future research will have to confirm these findings by conducting an accurate ToM assessment with high measuring sensitivity and going beyond first-order (i.e., understanding another person's thoughts) - versus second-order (i.e., understanding what someone else thinks another person thinks) or third-order ("I think that you think that he/she thinks that another person thinks")

ToM comparisons (Bosco, Gabbatore, & Tirassa, 2014). Further research also appears to be

needed regarding the different types of mental states involved in ToM (thoughts, beliefs, desires, positive and negative emotions).

Regarding empathy, there are consensual results regarding overall empathy scores and the level of bullying perpetration (Bergmann & Baier, 2018; Espelage et al., 2018; Jenkins et al., 2017; Steffgen, König, Pfetsch, & Melzer, 2011; Yang & Kim, 2017; You, Lee, Lee, & Kim, 2015), lower scores are robustly correlated with both traditional and cyberbullying. More specifically, lower affective (or emotional) empathy is involved in bullying others. In line with a previous systematic review on children (van Noorden et al., 2015), adolescent perpetrators of bullying appear to have difficulty experiencing the feelings of others (although they are capable of understanding others' feelings). Few studies have so far investigated the relationship between empathy and victimization (Antoniadou et al., 2019; Espelage et al., 2018; Jenkins et al., 2017; Martínez et al., 2020; Nickerson & Mele-Taylor, 2014). Recent research has been quite conflicting. Some studes have concluded that victimization is related to lower empathy among adolescents (Jenkins et al., 2017; Martínez et al., 2020), while others have failed to find any significant correlations (Antoniadou et al., 2019; Espelage et al., 2018; Walters & Espelage, 2019). One study found that cybervictims exhibited greater affective and cognitive empathy than noninvolved adolescents (Pettalia, Levin, & Dickinson, 2013). These results based solely on adolescent samples appear more heterogeneous than those set out in van Noorden et al.'s (2015) systematic review, which did not distinguish between children and adolescents, and concluded that school victimization is negatively associated with cognitive empathy. Empathic skills facilitate good-quality interpersonal relationships and may thus reduce victimization and promote social adaptation (Kokkinos & Kipritsi, 2011). If victims have difficulty sharing and inferring other people's emotions, this can lead to rejection by their peers. This hypothesis tends to be validated in children but has yet to be verified in adolescents.

Regarding bystanders, defending is strongly related to higher levels of empathy, whereas followers and outsiders tend to have lower scores (e.g., Haddock & Jimerson, 2017; Yang & Kim, 2017). This is consistent with Ma, Meter, Chen, and Lee (2019)'s recent meta-analysis of samples of children and adolescents (aged 5-17 years). It should be noted, however, that no such association has been found for cyberbullying (Ang & Goh, 2010). Given their use of relatively homogeneous tools, these cross-sectional results highlight the importance of empathy in bullying involvement. Nevertheless, further investigation is needed to establish a possible causal link and to define the specific features of empathy in victimization and cyberbullying.

Interpersonal and communication skills include interacting without blaming, which encompasses moral action through affective self-regulatory mechanisms (e.g., social cognitive theory of the moral self; Bandura, 1991). The field of moral disengagement has attracted the highest number of articles. Higher moral disengagement has been found among both traditional and cyberbullies, but also among the bullied (especially with internalization of blame; e.g., Sim & Tan, 2013; Song & Oh, 2018; Thornberg et al., 2012; Wang, Ryoo, Swearer, Turner, & Goldberg, 2017). However, in the latter case, results seem to vary according to the type of bullying measure (peer-nominated or self-reported; Obermann, 2013). By the same token, defending bystanders have lower moral disengagement than either outsiders or probullies (e.g., Caravita et al., 2012; Song & Oh, 2018; Thornberg et al., 2012; von Grundherr et al., 2017). These results are consistent with previous findings on moral disengagement and aggression (Gini et al., 2014; Ma et al., 2019) or bullying roles in youth (Killer et al., 2019), but question the bidirectionality of the association between moral disengagement and bullying among adolescents.

### 1.3 Self-management skills

Coping skills in aggressive behavior include expressing and recognizing emotion (coping with emotion). We identified four studies of adolescents' emotional skills and bullying (Ciucci et al., 2014; Herts et al., 2012; Lomas et al., 2012; Pozzoli et al., 2017). Two of them found that emotion recognition was difficult for adolescents involved in bullying, whether they were the victims or the bullies (Ciucci et al., 2014; Pozzoli et al., 2017). This problem mainly seemed to affect negative emotions (e.g., fear, sadness, anger), despite the heterogeneity of the emotion measures used. The regulation-based approach adopted by the two other studies (Herts et al., 2012; Lomas et al., 2012) also revealed poorer regulation of negative emotion among the bullied, but divergent results for bullies. Based on current knowledge, it is not possible to draw a firm conclusion on the relationships between coping with emotions and peer harassment. Future studies should aim to implement consensual screening of emotional abilities and bullying involvement. In addition, as authors have yet to consider bystanders, the question of their emotional abilities remains unanswered.

Many studies have described the links between coping strategies and victimization, using a variety of measures (e.g., Garnefski & Kraaij, 2014; Keith, 2018). Being a victim is closely related to emotion(cognitive)-oriented coping strategies (Garnefski & Kraaj, 2014), avoidance (Murray-Harvey et al., 2012; Singh & Bussey, 2011), and social support-seeking (Skrzypiec et al., 2011). These results are in line with previous studies of bullied school-aged children (Andreou, 2001; Bijttebier & Vertommen, 1998). For bullies, the only study (Parris et al., 2019) to have investigated this link so far, found a significant correlation with externalizing and internalizing coping strategies, while externalizing coping tended be used more by child bully-victims (see Hansen, Steenberg, Palic, & Elklit, 2012). No published study has yet investigated coping among adolescent bystanders, despite the promising prospects in terms of research and potential levers for bullying prevention.

### 2. Recommendations for Research and Clinical Implications

### 2.1 Improving research design and methodology

The results of the studies included in this review underscore the need to ensure that bullying measures are strictly circumscribed (and validated), so that bullying can be accurately and reliably evaluated. As bullying is a global problem, crosscultural psychometric validation studies are needed (Konishi et al., 2009). Hamburger and Basile (2011) produced a useful guide to the tools available for measuring each bullying experience (bullies, bullied, bystander, etc.). It is also important to address the theoretical question of whether bullying should be considered as categorical (i.e., groups of bullies, bullied etc.) or dimensional (i.e., continuum of involvement). While the original definition of Olweus is categorical, many studies favor a dimensional approach (e.g., Espelage, 2016; Espelage, Bosworth, & Simon, 2001; Rigby, 2002). Espelage et al. (2001) suggested that youth cannot always neatly be categorized as either bullies or nonbullies or victims. Categorizing adolescents in this way (based on extreme scores) excludes those who report low or moderate levels of bullying. From a dimensional perspective, bullying actions can be viewed as occurring along a continuum of severity in different shades of gray, rather than black-and-white thinking.

Thought should be given to identifying the most suitable approach in terms of research and interventions (e.g., general or focused on the adolescent involved in bullying). As such, a cluster analysis approach developed to explore bullying in the workplace (e.g., Leon-Perez, Notelaers, Arenas, Munduate, & Medina, 2014) could be a useful alternative method for measuring bullying at school. It might capture the complex and dynamic nature of bullying more effectively. Research on bullying continues to adopt a dichotomous perspective (bullies vs. bullied) despite a well-established relationship between victimization and offending (e.g., DeCamp & Newby, 2015). Further research is needed to explore (*i*) the victim-offender overlap (i.e., victims and offenders are often the same people; Jennings, Piquero, & Reingle,

2012), and (*ii*) revictimization among the victims of bullying (e.g., sexual aggression, traumatic childhood experiences or exposure to violence; Beckley et al., 2018).

There are also issues surrounding the assessment of life skills, especially ToM, emotional abilities, and coping. Validated measurement tools adapted to adolescents should be used to improve the relevance of empirical studies. Reliable results on the relationships between these life skills and bullying need to be produced, to guide early preventive actions and rehabilitation and support initiatives in the future. This calls for longitudinal research designs, to understand any possible effects of life skills such as EFs and empathy on bullying involvement.

# 2.2 Important topic areas to be investigated

The current systematic review revealed that although bullying mainly takes place during adolescence, research on this age group (and its psychological aspects) remains limited. As underlined by Botvin and Griffin (2003), adolescence is a crucial period where young people develop their cognitive and self-management skills (e.g., decision making, goal setting, personal mastery, social support). This skill enhancement must be understood in the context of social, cognitive, and behavioral development during adolescence. We therefore recommend that future studies investigate more precisely the relationships between adolescents' increased cognitive potential and different forms of peer harassment (i.e., direct, indirect, cyber) and involvement (i.e., bullied, bullies, defenders). Given all we know about the cognitive and affective specificities of adolescence, it is not always possible to generalize child-based results to adolescents. From this perspective, authors should distinguish between the three stages (i.e., early, middle and late) of adolescence, in order to take account of sociocognitive maturation. Finally, although prevention programs are increasingly focusing on bystanders (Polanin, Espelage, & Pigott, 2012), all too few studies explore the types of cognitive-behavioral skills involved.

# 2.3 Life skills training for adolescents

Our review highlighted the importance of training in life skills in order to overcome socio-emotional behavioral difficulties. Although some domains such as ToM and EFs need further investigation before training programs can be developed, some recommendations can already be made for empathy skills, moral disengagement, and coping.

Empathy plays an important role in prosocial behavior, and levels of affective empathy were negatively related to aggression. Many adolescents who bully are quite cognitively empathic. It might be wise to strengthen the affective empathy of bullies, in order to improve their conflict resolution skills. Adolescents who understand the emotions and perspectives of others tend to display prosocial and moral behaviors (Feshbach & Feshbach, 2009). Peace education programs and school-based social and emotional learning programs should be effective in increasing students' empathy levels (Durlak & Weissberg, 2011; Polat & Günçavdı, 2020; Sagkal, Turnuklu, & Totan, 2012). The goal of these programs is to help participants develop the empathic skills they need to adopt the perspectives of others and understand their emotions. Empathy plays an important role in cooperation and altruistic behavior, positive conflict resolution and the limitating of aggressive behaviors (Feshbach & Feshbach, 2009).

Moral disengagement is a well-known key element in bullying perpetration and nodefending behaviors. Brief persuasive communications from mass media or peers may produce short-term changes (McAlister, 2001). Furthermore, cognitive therapy techniques should be efficient in bringing about longer-term changes, if moral disengagement is treated as a self-serving cognitive distortion (Ribeaud & Eisner, 2010). The major goal should be to identify and change the cognitive processes underlying the initiation, maintenance and justification of peer harassment among bullies and probullying witnesses, via social responsibility training and remediation of cognitive bias. When bullying victims internalize aspects of moral disengagement, it can lead to cognitive self-blame attribution, and consequently to poorer behavioral adjustment. This is often observed among victims of violence (e.g., Ullman, 1996) and should be targeted more by anti-bullying campaigns.

Deficient strategies for *coping* with stress among bullying victims is one of the most well supported conclusions of our systematic review. As stressed above, victims tend to internalize shame and fear, so interventions designed to promote adaptive strategies for coping with interpersonal problems of bullying seem a promising solution. As underlined by Harrell, Mercer and DeRosier (2009), the major aim is to help adolescents manage their emotions, build self-confidence, and enhance coping skills. This could be achieved using cognitive-behavioral techniques such as positive reinforcement, corrective feedback, and cognitive reframing.

Interventions that simultaneously integrate these three skills may produce powerful behavioral outcomes in school bullying prevention. However, more studies need to be carried out in order to evaluate this type of skills-based health education.

### Limitations

The present review had several limitations that warrant acknowledgement. First, we investigated all empirical studies among populations of adolescents, but future research could benefit from distinguishing between the developmental stages (from early adolescence to emerging adulthood). Second, this review focused on cognitive and behavioral skills, and therefore excluded studies that examined self-related cognitions (e.g., self-esteem or assertiveness). This systematic literature review included studies from a range of countries, but the possible cultural influences (e.g., individualistic vs. collectivist) on bullying and life skills were not discussed. As we restricted our literature search to quantitative studies published in English, there may also have been publication biases, such as not taking into account of qualitative studies or ones published in another language. Finally, owing to the

heterogeneity of the study designs (e.g., methodological quality), outcomes and populations, together with the lack of information about the strength of the evidence (e.g., effect sizes), a meta-analysis was not feasible. The review's findings for particular skills (e.g., ToM, EFs) are therefore based on a small number of studies, attesting to the dearth of research on their links to bullying.

### **Conclusion**

Studies of bullying in adolescence vary, depending on the type or form of bullying being investigated, tools used for measuring, sex and age, making it harder to generalize the results and draw conclusions. Life skills education is promoted by the WHO as a means of facilitating the practice and reinforcement of psychosocial and interpersonal skills in a developmentally appropriate way. The teaching of life skills should promote positive and prosocial attitudes and behaviors (Srikala & Kumar, 2010; Wong, Zimmerman, & Parker, 2010). More specifically, cognitive and behavioral abilities such as empathy, moral judgment and behavioral adjustment should be trained through explanation, observation and practice of each skill in bullying situations (e.g., modelling, feedback based on role-playing in typical scenarios). Further studies will need to confirm the contribution of cognitive and emotional management skills to bullying behaviors. This systematic review underlines the need to develop an integrated model of cognition, emotion and behavioral processes of peer harassment, encompassing interactions and feedback.

### References

- Achenbach, T. (1991). *Manual for the Child Behaviour Checklist/4–18 and 1991 Profile*. University of Vermont.
- Allan, J. L., McMinn, D., & Daly, M. (2016). A bidirectional relationship between executive function and health behavior: Evidence, implications, and future directions. *Frontiers in Neuroscience*, 10, 386. doi:10.3389/fnins.2016.00386
- Almeida, A., Correia, I., & Marinho, S. (2009). Moral disengagement, normative beliefs of peer group, and attitudes regarding roles in bullying. *Journal of School Violence*, 9, 23-36. doi:10.1080/15388220903185639
- Alvarez, J. A., & Emory, E. (2006). Executive function and the frontal lobes: A meta-analytic review. *Neuropsychology Review*, *16*, 17-42. doi:10.1007/s11065-006-9002-x
- Andreou, E. (2001). Bully/victim problems and their association with coping behaviour in conflictual peer interactions among school-age children. *Educational Psychology*, *21*, 59-66. doi:10.1080/01443410125042
- Ang, R. P., & Goh, D. H. (2010). Cyberbullying among adolescents: The role of affective and cognitive empathy, and gender. *Child Psychiatry and Human Development*, *41*, 387-397. doi:10.1007/s10578-010-0176-3
- Antoniadou, N., Kokkinos, C. M., & Fanti, K. A. (2019). Traditional and cyber bullying/victimization among adolescents: Examining their psychosocial profile through latent profile analysis. *International Journal of Bullying Prevention*, 1, 85-98. doi: 10.1007/s42380-019-00010-0
- Antoniadou, N., Kokkinos, C. M., & Markos, A. (2016). Development, construct validation and measurement invariance of the Greek cyber-bullying/victimization experiences questionnaire (CBVEQ-G). *Computers in Human Behavior*, 65, 380-390. doi: 10.1016/j.chb.2016.08.032
- Baggetta, P., & Alexander, P. A. (2016). Conceptualization and operationalization of executive function. *Mind, Brain, and Education*, *10*, 10-33. doi:10.1111/mbe.12100
- Baker, J. P., & Berenbaum, H. (2007). Emotional approach and problem-focused coping: A comparison of potentially adaptive strategies. *Cognition & Emotion*, 21, 95-118. doi:10.1080/02699930600562276
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, *50*, 248-287. doi:10.1016/0749-5978(91)90022-L

- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71, 364-374. doi:10.1037/0022-3514.71.2.364
- Barchia, K., & Bussey, K. (2011). Individual and collective social cognitive influences on peer aggression: Exploring the contribution of aggression efficacy, moral disengagement, and collective efficacy. *Aggressive Behavior*, *37*, 107-120. doi:10.1002/ab.20375
- Barriga, A. Q., & Gibbs, J. C. (1996). Measuring cognitive distortion in antisocial youth:

  Development and preliminary validation of the "How I think" questionnaire. *Aggressive Behavior*, 22, 333-343. doi:10.1002/(SICI)1098-2337(1996)22:5<333::AID-AB2>3.0.CO;2-K
- Bauman, S., Toomey, R. B., & Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. *Journal of Adolescence*, *36*, 341-350. doi:10.1016/j.adolescence.2012.12.001
- Beckley, A. L., Caspi, A., Arseneault, L., Barnes, J. C., Fisher, H. L., Harrington, H., ... Moffitt, T. E. (2018). The developmental nature of the victim-offender overlap. *Journal of Developmental and Life-Course Criminology*, 4, 24-49. doi:10.1007/s40865-017-0068-3
- Bergmann, M., & Baier, D. (2018). Prevalence and correlates of cyberbullying perpetration. Findings from a German representative student survey. *International Journal of Environmental Research and Public Health*, *15*, 274. doi:10.3390/ijerph15020274
- Best, J. R., & Miller, P. H. (2010). A developmental perspective on executive function. *Child Development*, 81, 1641-1660. doi:10.1111/j.1467-8624.2010.01499.x
- Bijttebier, P., & Vertommen, H. (1998). Coping with peer arguments in school-age children with bully/victim problems. *British Journal of Educational Psychology*, 68, 387-394. doi:10.1111/j.2044-8279.1998.tb01299.x
- Bjärehed, M., Thornberg, R., Wänström, L., & Gini, G. (2020). Mechanisms of moral disengagement and their associations with indirect bullying, Direct bullying, and proaggressive bystander behavior. *The Journal of Early Adolescence*, 40, 28-55. doi: 10.1177/0272431618824745
- Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, *30*, 177-188. doi:10.1007/BF01420988
- Björkqvist, K., Lagerspetz, K., & Osterman, K. (1992). *The Direct and Indirect Aggression Scales*. Abo Akademi University.

- Black, D. S., Semple, R. J., Pokhrel, P., & Grenard, J. L. (2011). Component processes of executive function mindfulness, self-control, and working memory and their relationships with mental and behavioral health. *Mindfulness*, 2, 179-185. doi:10.1007/s12671-011-0057-2
- Blair, R. J. R., & Coles, M. (2000). Expression recognition and behavioural problems in early adolescence. *Cognitive Development*, *15*, 421-434. doi:10.1016/S0885-2014(01)00039-9
- Blakemore, S.-J. (2012). Development of the social brain in adolescence. *Journal of the Royal Society of Medicine*, 105, 111-116. doi:10.1258/jrsm.2011.110221
- Blakemore, S.-J., & Choudhury, S. (2006). Development of the adolescent brain: Implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry*, 47, 296-312. doi:10.1111/j.1469-7610.2006.01611.x
- Bosco, F. M., Gabbatore, I., & Tirassa, M. (2014). A broad assessment of theory of mind in adolescence: The complexity of mindreading. *Consciousness and Cognition*, *24*, 84-97. doi:10.1016/j.concog.2014.01.003
- Bosworth, K., & Espelage, D. (1995). *Teen Conflict Survey*. Center for Adolescent Studies, Indiana University.
- Botvin, G. J., & Griffin, K. W. (2003). Life skills, adolescence. In T. P. Gullotta, M. Bloom, J. Kotch, C. Blakely, L. Bond, G. Adams, ... J. Ramos (Eds.), *Encyclopedia of primary prevention and health promotion* (p. 654-658). Springer US. doi:10.1007/978-1-4615-0195-4\_96
- Bradshaw, C. P., Waasdorp, T. E., & Johnson, S. L. (2015). Overlapping verbal, relational, physical, and electronic forms of bullying in adolescence: Influence of school context. *Journal of Clinical Child & Adolescent Psychology*, 44, 494-508. doi:10.1080/15374416.2014.893516
- Brighi, A., Mameli, C., Menin, D., Guarini, A., Carpani, F. & Slee, P. T. (2019). Coping with cybervictimization: The role of direct confrontation and resilience on adolescent wellbeing. *International Journal of Environmental Research and Public Health*, *16*, 4893. doi: 10.3390/ijerph16244893
- Brown, B. B. (2013). Adolescents' relationships with peers. In R. M. Lerner and L. Steinberg (Eds.), *Handbook of adolescent psychology (2nd edition)*. John Wiley & Sons.
- Bryant, B. K. (1982). An index of empathy for children and adolescents. *Child Development*, 53, 413-425. doi:10.2307/1128984

- Bussey, K., Luo, A., Fitzpatrick, S., & Allison, K. (2020). Defending victims of cyberbullying: The role of self-efficacy and moral disengagement. *Journal of School Psychology*, 78, 1-12. doi: 10.1016/j.jsp.2019.11.006
- Calvete, E., Orue, I., Estévez, A., Villardón, L., & Padilla, P. (2010). Cyberbullying in adolescents: Modalities and aggressors' profile. *Computers in Human Behavior*, 26, 1128-1135. doi: 10.1016/j.chb.2010.03.01
- Camodeca, M., & Goossens, F. A. (2004). Aggression, social cognitions, anger and sadness in bullies and victims. *Journal of Child Psychology and Psychiatry*, *46*, 186-197. doi:10.1111/j.1469-7610.2004.00347.x
- Capage, L., & Watson, A. C. (2001). Individual differences in theory of mind, aggressive behavior, and social skills in young children. *Early Education and Development*, *12*(4), 613-628. doi:10.1207/s15566935eed1204\_7
- Caravita, S. C. S., Gini, G., & Pozzoli, T. (2012). Main and moderated effects of moral cognition and status on bullying and defending: Morality and bullying moderations by status. *Aggressive Behavior*, *38*, 456-468. doi:10.1002/ab.21447
- Caruso, D. R., & Mayer, J. D. (1998). A measure of emotional empathy for adolescents and adults. Unpublished manuscript.
- Cassidy, T., & Long, C. (1996). Problem-solving style, stress and psychological illness: Development of a multifactorial measure. *British Journal of Clinical Psychology*, *35*, 265-277. doi:10.1111/j.2044-8260.1996.tb01181.x
- Causey, D. L., & Dubow, E. F. (1992). Development of a self-report coping measure for elementary school children. *Journal of Clinical Child Psychology*, 21(1), 47-59. doi:10.1207/s15374424jccp2101\_8
- Chan, H. C., & Wong, D. S. W. (2017). Coping with cyberbullying victimization: An exploratory study of Chinese adolescents in Hong Kong. *International Journal of Law, Crime and Justice*, 50, 71-82. doi:10.1016/j.ijlcj.2017.04.003
- Chan, H. C., & Wong, D. S. W. (2019). Traditional school bullying and cyberbullying perpetration: Examining the psychosocial characteristics of Hong Kong male and female adolescents. *Youth & Society*, *51*, 3-29. doi: 10.1177/0044118X1665805
- Chester, K. L., Callaghan, M., Cosma, A., Donnelly, P., Craig, W., Walsh, S., & Molcho, M. (2015). Cross-national time trends in bullying victimization in 33 countries among children aged 11, 13 and 15 from 2002 to 2010. *European Journal of Public Health*, 25, 61-64. doi:10.1093/eurpub/ckv029

- Ciarrochi, J., Heaven, P. C. L., & Supavadeeprasit, S. (2008). The link between emotion identification skills and socio-emotional functioning in early adolescence: A 1-year longitudinal study. *Journal of Adolescence*, *31*, 565-582. doi:10.1016/j.adolescence.2007.10.004
- Ciucci, E., Baroncelli, A., & Nowicki, S. (2014). Emotion perception accuracy and bias in face-to-face versus cyberbullying. *The Journal of Genetic Psychology*, *175*, 382-400. doi:10.1080/00221325.2014.934653
- Clark, C., Prior, M., & Kinsella, G. (2002). The relationship between executive function abilities, adaptive behaviour, and academic achievement in children with externalizing behaviour problems. *Journal of Child Psychology and Psychiatry*, 43, 785-796. doi:10.1111/1469-7610.00084
- Coolidge, F. L., DenBoer, J. W., & Segal, D. L. (2004). Personality and neuropsychological correlates of bullying behavior. *Personality and Individual Differences*, *36*, 1559-1569. doi:10.1016/j.paid.2003.06.005
- Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., Simons-Morton, B., ... Pickett, W. (2009). A cross-national profile of bullying and victimization among adolescents in 40 countries. *International Journal of Public Health*, *54*, 216-224. doi:10.1007/s00038-009-5413-9
- Craig, W. M., & Pepler, D. J. (2003). Identifying and targeting risk for involvement in bullying and victimization. *The Canadian Journal of Psychiatry*, 48, 577-582. doi:10.1177/070674370304800903
- Crick, N. R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology*, 8, 367-380. doi:10.1017/S0954579400007148
- Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience*, *13*, 636-650. doi:10.1038/nrn3313
- Cronqvist, A., Klang, B., & Björvell, H. (1997). The use and efficacy of coping strategies and coping styles in a Swedish sample. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*, 6, 87-96.
- Crowley, J. P., Harvey-Knowles, J. A., & Riggs, N. R. (2016). Message processes and their associations with adolescents' executive function and reports of bullying. *School Psychology International*, *37*, 32-50. doi:10.1177/0143034315605574

- Cuff, B. M. P., Brown, S. J., Taylor, L., & Howat, D. J. (2016). Empathy: A review of the concept. *Emotion Review*, 8, 144-153. doi:10.1177/1754073914558466
- Davidson, M. C., Amso, D., Anderson, L. C., & Diamond, A. (2006). Development of cognitive control and executive functions from 4 to 13 years: Evidence from manipulations of memory, inhibition, and task switching. *Neuropsychologia*, *44*, 2037-2078. doi:10.1016/j.neuropsychologia.2006.02.006
- DeCamp, W., & Newby, B. (2015). From bullied to deviant: The victim-offender overlap among bullying victims. *Youth Violence and Juvenile Justice*, *13*, 3-17. doi:10.1177/1541204014521250
- Decety, J. (2005). Une anatomie de l'empathie. PSN, 3, 16-24. doi:10.1007/BF03006827
- Del Rey, R., Casas, J. A., & Ortega Ruiz, R. (2017). Desarrollo y validación de la Escala de Convivencia Escolar (ECE). *Universitas Psychologica*, *16*, 1-11. doi:10.11144/Javeriana.upsy16-1.dvec
- Del Rey, R., Lazuras, L., Casas, J. A., Barkoukis, V., Ortega-Ruiz, R., & Tsorbatzoudis, H. (2016). Does empathy predict (cyber) bullying perpetration, and how do age, gender and nationality affect this relationship? *Learning and Individual Differences*, 45, 275-281. doi:10.1016/j.lindif.2015.11.021
- Demaray, M. K., Summers, K. H., Jenkins, L. N., & Becker, L. D. (2016). Bullying Participant Behaviors Questionnaire (BPBQ): Establishing a reliable and valid measure. *Journal of School Violence*, 15, 158-188. doi:10.1080/15388220.2014.964801
- Denham, S. A., Caverly, S., Schmidt, M., Blair, K., DeMulder, E., Caal, S., ... Mason, T. (2002). Preschool understanding of emotions: Contributions to classroom anger and aggression. *Journal of Child Psychology and Psychiatry*, *43*, 901-916. doi:10.1111/1469-7610.00139
- Deniz, M. E., & Ersoy, E. (2016). Examining the relationship of social skills, problem solving and bullying in adolescents. *International Online Journal of Educational Sciences*, 8, 1-7. doi:10.15345/iojes.2016.01.001
- Denson, T. F., DeWall, C. N., & Finkel, E. J. (2012). Self-control and aggression. *Current Directions in Psychological Science*, 21, 20-25. doi:10.1177/0963721411429451
- Dooley, J. J., Pyżalski, J., & Cross, D. (2009). Cyberbullying versus face-to-face bullying. *Zeitschrift für Psychologie / Journal of Psychology*, 217, 182-188. doi:10.1027/0044-3409.217.4.182
- Due, P., Holstein, B. E., Lynch, J., Diderichsen, F., Gabhain, S. N., Scheidt, P., & Currie, C. (2005). Bullying and symptoms among school-aged children: International comparative

- cross-sectional study in 28 countries. *European Journal of Public Health*, *15*, 128-132. doi:10.1093/eurpub/cki105
- Dumontheil I., Apperly I. A., & Blakemore S.-J. (2010). Online usage of theory of mind continues to develop in late adolescence. *Developmental Science*, *13*, 331-338. doi:10.1111/j.1467-7687.2009.00888.x
- Durlak, J. A., & Weissberg, R. P. (2011). Promoting social and emotional development is an essential part of students' education. *Human Development*, *54*, 1-3. doi:10.1159/000324337
- Eslea, M., & Rees, J. (2001). At what age are children most likely to be bullied at school? *Aggressive Behavior*, 27, 419-429. doi:10.1002/ab.1027
- Espelage, D. L. (2016). Leveraging school-based research to inform bullying prevention and policy. *American Psychologist*, 71, 768-775. doi:10.1037/amp0000095
- Espelage, D. L., & Asidao, C. S. (2001). Conversations with middle school students about bullying and victimization: Should we be concerned? *Journal of Emotional Abuse*, 2, 49-62. doi:10.1300/J135v02n02 04
- Espelage, D. L., Bosworth, K., & Simon, T. R. (2001). Short-term stability and prospective correlates of bullying in middle-school students: An examination of potential demographic, psychosocial, and environmental influences. *Violence and Victims*, *16*, 411-426. doi:10.1891/0886-6708.16.4.411
- Espelage, D. L., & Holt, M. K. (2001). Bullying and victimization during early adolescence: Peer influences and psychosocial correlates. *Journal of Emotional Abuse*, 2, 123-142. doi:10.1300/J135v02n02\_08
- Espelage, D. L., Hong, J. S., Kim, D. H., & Nan, L. (2018). Empathy, attitude towards bullying, theory-of-mind, and non-physical forms of bully perpetration and victimization among U.S. middle school students. *Child & Youth Care Forum*, 47, 45-60. doi:10.1007/s10566-017-9416-z
- Felix, E. D., Sharkey, J. D., Green, J. G., Furlong, M. J., & Tanigawa, D. (2011). Getting precise and pragmatic about the assessment of bullying: The development of the California Bullying Victimization Scale. *Aggressive Behavior*, *37*, 234-247. doi:10.1002/ab.20389
- Feshbach, N. D., & Feshbach, S. (2009). Empathy and education. In J. Decety & W. Ickes (Eds.), *The social neuroscience of empathy* (pp. 85-98). London: The MIT Press.

- Finkelhor, D., Ormrod, R. K., Turner, H. A., & Hamby, S. L. (2005). Measuring polyvictimization using the Juvenile Victimization Questionnaire. *Child Abuse & Neglect*, 29, 1297-1312. doi:10.1016/j.chiabu.2005.06.005
- Finkelhor, D., Turner, H. A., Shattuck, A., & Hamby, S. L. (2013). Violence, crime, and abuse exposure in a national sample of children and youth: An update. *JAMA Pediatrics*, 167, 614-621. doi:10.1001/jamapediatrics.2013.42
- Finkelhor, D., Turner, H. A., Shattuck, A., & Hamby, S. L. (2015). Prevalence of childhood exposure to violence, crime, and abuse: Results from the National Survey of Children's Exposure to Violence. *JAMA Pediatrics*, *169*, 746-754. doi:10.1001/jamapediatrics.2015.0676
- Fodor, J. A. (1992). A theory of the child's theory of mind. Cognition, 44, 283-296.
- Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology*, *50*, 571-579.
- Folkman, S. (2013). Stress: Appraisal and coping. In M. D. Gellman & J. R. Turner (Eds.), *Encyclopedia of behavioral medicine* (pp. 1913-1915). Springer.
- Frith, C. D., & Frith, U. (2008). Implicit and explicit processes in social cognition. *Neuron*, 60, 503-510. doi:10.1016/j.neuron.2008.10.032
- Frydenberg, E., & Lewis, R. (s. d.). *The adolescent coping scale: Practitioners manual.*Australian Council for Educational Research.
- Gámez-Guadix, M., Villa-George, F., & Calvete, E. (2014). Psychometric properties of the Cyberbullying Questionnaire (CBQ) among Mexican adolescents. *Violence and Victims*, 29, 232-247. doi.org/10.1891/0886-6708.vv-d-12-00163r1.
- Gao, L., Liu, J., Wang, W., Yang, J., Wang, P., & Wang, X. (2020). Moral disengagement and adolescents' cyberbullying perpetration: Student-student relationship and gender as moderators. *Children and Youth Services Review*, *116*, 105-119. doi: 10.1016/j.childyouth.2020.105119
- Garett, R., Lord, L. R., & Young, S. D. (2016). Associations between social media and cyberbullying: A review of the literature. *Mhealth*, 2. doi:10.21037/mhealth.2016.12.01
- Garnefski, N., & Kraaij, V. (2014). Bully victimization and emotional problems in adolescents: Moderation by specific cognitive coping strategies? *Journal of Adolescence*, *37*, 1153-1160. doi:10.1016/j.adolescence.2014.07.005

- Georgiou, S. N., Charalambous, K., & Stavrinides, P. (2020). Mindfulness, impulsivity, and moral disengagement as parameters of bullying and victimization at school. *Aggressive Behavior*, 46, 107-115. doi: 10.1002/ab.21876
- Gibbons, F. X., Gerrard, M., Blanton, H., & Russell, D. W. (1998). Reasoned action and social reaction: Willingness and intention as independent predictors of health risk. *Journal of Personality and Social Psychology, 74*, 1164-1180. doi: 10.1037/0022-3514.74.5.1164.
- Gini, G., Albiero, P., Benelli, B., & Altoè, G. (2008). Determinants of adolescents' active defending and passive bystanding behavior in bullying. *Journal of Adolescence*, *31*, 93-105. doi:10.1016/j.adolescence.2007.05.002
- Gini, G., & Pozzoli, T. (2009). Association between bullying and psychosomatic problems: A meta-analysis. *Pediatrics*, *123*, 1059-1065. doi:10.1542/peds.2013-0614
- Gini, G., Pozzoli, T., & Bussey, K. (2014). Collective moral disengagement: Initial validation of a scale for adolescents. *European Journal of Developmental Psychology*, 11, 386-395. doi: 10.1080/17405629.2013.851024.
- Gini, G., Pozzoli, T., & Hymel, S. (2014). Moral disengagement among children and youth: A meta-analytic review of links to aggressive behavior: Moral disengagement and aggressive behavior. *Aggressive Behavior*, 40, 56-68. doi:10.1002/ab.21502
- Gini, G., Thornberg, R., & Pozzoli, T. (2020). Individual moral disengagement and bystander behavior in bullying: The role of moral distress and collective moral disengagement.

  \*Psychology of Violence\*, 10, 38-47. doi: 10.1037/vio0000223
- Gleason, K. A., Jensen-Campbell, L. A., & Ickes, W. (2009). The role of empathic accuracy in adolescents' peer relations and adjustment. *Personality and Social Psychology Bulletin*, *35*, 997-1011. doi:10.1177/0146167209336605
- Goldstein, S., Naglieri, J. A., Princiotta, D., & Otero, T. M. (2014). Introduction: A history of executive functioning as a theoretical and clinical construct. In *Handbook of executive functioning* (pp. 3-12). Springer.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 26, 41-54. doi: 10.1023/b:joba.0000007455.08539.94
- Griffin Smith, R., & Gross, A. (2006). Bullying: Prevalence and the effect of age and gender. *Child & Family Behavior Therapy*, 28, 13-37. doi:10.1300/J019v28n04\_02

- Gül, H., Fırat, S., Sertçelik, M., Gül, A., Gürel, Y., & Kılıç, B. G. (2019). Cyberbullying among a clinical adolescent sample in Turkey: Effects of problematic smartphone use, psychiatric symptoms, and emotion regulation difficulties. *Psychiatry and Clinical Psychopharmacology*, 29, 547-557. doi: 10.1080/24750573.2018.1472923
- Guy, A., Lee, K., & Wolke, D. (2019). Comparisons between adolescent bullies, victims, and bully-victims on perceived popularity, social impact, and social preference. *Frontiers in Psychiatry*, *10*, 868. doi:10.3389/fpsyt.2019.00868
- Guy, S. C., Gioia, G. A., & Isquith, P. K. (2004). *BRIEF-SR: Behavior Rating Inventory of Executive Function--Self-Report Version: Professional Manual*. Psychological Assessment Resources.
- Haddock, A. D., & Jimerson, S. R. (2017). An examination of differences in moral disengagement and empathy among bullying participant groups. *Journal of Relationships Research*, 8, 1-15. doi:10.1017/jrr.2017.15
- Hamburger, M. E., & Basile, K. C. (2011). *Measuring bullying victimization, perpetration, and bystander experiences: A compendium of assessment tools*. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Hamm, M. P., Newton, A. S., Chisholm, A., Shulhan, J., Milne, A., Sundar, P., ... Hartling,
  L. (2015). Prevalence and effect of cyberbullying on children and young people: A scoping review of social media studies. *JAMA Pediatrics*, 169, 770-777. doi: 10.1001/jamapediatrics.2015.0944
- Hansen, T. B., Steenberg, L. M., Palic, S., & Elklit, A. (2012). A review of psychological factors related to bullying victimization in schools. *Aggression and Violent Behavior*, *17*, 383-387. doi:10.1016/j.avb.2012.03.008
- Harrell, A. W., Mercer, S. H., & DeRosier, M. E. (2009). Improving the social-behavioral adjustment of adolescents: The effectiveness of a social skills group intervention. *Journal of Child and Family Studies*, *18*, 378-3870. doi: 10.1007/s10826-008-9241-y
- Hase, C., Golberg, S., Smith, D., Stuck, A., & Campain, J. (2015). Impacts of traditional bullying and cyberbullying on the mental health of middle school and high school students. *Psychology in the Schools*, *52*, 607-617. doi:10.1002/pits.21841
- Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, *41*, 441-455.
- Hawkins, D. L., Pepler, D. J., & Craig, W. M. (2001). Naturalistic observations of peer interventions in bullying. *Social Development*, *10*, 512-527.

- Haynie, D. L., Nansel, T., Eitel, P., Crump, A. D., Saylor, K., Yu, K., & Simons-Morton, B. (2001). Bullies, victims, and bully/victims: Distinct groups of at-risk youth. *The Journal of Early Adolescence*, 21, 29-49. doi:10.1177/0272431601021001002
- Herba, C., & Phillips, M. (2004). Annotation: Development of facial expression recognition from childhood to adolescence: Behavioural and neurological perspectives. *Journal of Child Psychology and Psychiatry*, 45, 1185-1198. doi:10.1111/j.1469-7610.2004.00316.x
- Herts, K. L., McLaughlin, K. A., & Hatzenbuehler, M. L. (2012). Emotion dysregulation as a mechanism linking stress exposure to adolescent aggressive behavior. *Journal of Abnormal Child Psychology*, 40, 1111-1122. doi:10.1007/s10802-012-9629-4
- Holmes, C. J., Kim-Spoon, J., & Deater-Deckard, K. (2016). Linking executive function and peer problems from early childhood through middle adolescence. *Journal of Abnormal Child Psychology*, 44, 31-42. doi:10.1007/s10802-015-0044-5
- Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behavior*, 17, 311-322. doi:10.1016/j.avb.2012.03.003
- Hong Kong Education and Manpower Bureau. (2010). *Users' and training manual for measuring secondary students' performance in affective and social domains*. The Education and Manpower Bureau.
- Hughes, C., & Ensor, R. (2007). Executive function and theory of mind: Predictive relations from ages 2 to 4. *Developmental Psychology*, 43, 1447-1459. doi:10.1037/0012-1649.43.6.1447
- Hunter, S. C., & Boyle, J. M. E. (2004). Appraisal and coping strategy use in victims of school bullying. *British Journal of Educational Psychology*, 74, 83-107. doi:10.1348/000709904322848833
- Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. *The American Psychologist*, 70, 293-299. doi:10.1037/a0038928
- Jäger, R. S., Fisher, U., & Riebel, J. (2007). *Mobbing bei Schülerinnen und Schülern in der Bundesrepublik Deutschland*. Landau: Zentrum für empirisch pädagogische Forschung.
- Jenkins, J. M., & Astington, J. W. (2000). Theory of mind and social behavior: Causal models tested in a longitudinal study. *Merrill-Palmer Quarterly*, 46, 203-220.
- Jenkins, L. N., Demaray, M. K., & Tennant, J. (2017). Social, emotional, and cognitive factors associated with bullying. *School Psychology Review*, *46*, 42-64. doi:10.17105/SPR46-1.42-64

- Jennings, W. G., Piquero, A. R., & Reingle, J. M. (2012). On the overlap between victimization and offending: A review of the literature. *Aggression and Violent Behavior*, *17*, 16-26. doi:10.1016/j.avb.2011.09.003
- Jolliffe, D., & Farrington, D. P. (2006). Development and validation of the Basic Empathy Scale. *Journal of Adolescence*, 29, 589-611. doi:10.1016/j.adolescence.2005.08.010
- Jolliffe, D., & Farrington, D. P. (2011). Is low empathy related to bullying after controlling for individual and social background variables? *Journal of Adolescence*, *34*, 59-71. doi:10.1016/j.adolescence.2010.02.001
- Jungert, T., Piroddi, B., & Thornberg, R. (2016). Early adolescents' motivation to defend victims in school bullying and their perception of student-teacher relationships: A self-determination theory approach. *Journal of Adolescence*, *53*, 75-90. doi: 10.1016/j.adolescence.2016.09.001
- Juvonen, J., & Graham, S. (2014). Bullying in schools: The power of bullies and the plight of victims. *Annual Review of Psychology*, 65, 159-185. doi:10.1146/annurev-psych-010213-115030
- Kanetsuna, T., Smith, P. K., & Morita, Y. (2006). Coping with bullying at school: Children's recommended strategies and attitudes to school-based interventions in England and Japan. *Aggressive Behavior*, *32*, 570-580. doi:10.1002/ab.20156
- Kanske, P., Böckler, A., & Singer, T. (2015). Models, mechanisms and moderators dissociating empathy and theory of mind. In M. Wöhr & S. Krach (Éds.), *Social Behavior from Rodents to Humans* (Vol. 30, pp. 193-206). Springer International Publishing. doi:10.1007/7854\_2015\_412
- Keith, S. (2018). How do traditional bullying and cyberbullying victimization affect fear and coping among students? An application of General Strain Theory. *American Journal of Criminal Justice*, 43, 67-84. doi:10.1007/s12103-017-9411-9
- Killer, B., Bussey, K., Hawes, D. J., & Hunt, C. (2019). A meta-analysis of the relationship between moral disengagement and bullying roles in youth. *Aggressive Behavior*, 45, 450-462. doi: 10.1002/ab.21833
- Kiriakidis, S. P., & Kavoura, A. (2010). Cyberbullying: A review of the literature on harassment through the Internet and other electronic means. *Family & Community Health*, *33*, 82-93. doi:10.1097/FCH.0b013e3181d593e4
- Kloosterman, P. H., Kelley, E. A., Parker, J. D. A., & Craig, W. M. (2014). Executive functioning as a predictor of peer victimization in adolescents with and without an autism

- spectrum disorder. *Research in Autism Spectrum Disorders*, 8, 244-254. doi:10.1016/j.rasd.2013.12.006
- Kokkinos, C. M., & Kipritsi, E. (2011). The relationship between bullying, victimization, trait emotional intelligence, self-efficacy and empathy among preadolescents. *Social Psychology of Education*, *15*, 41-58. doi:10.1007/s11218-011-9168-9
- Konishi, C., Hymel, S., Zumbo, B. D., Li, Z, Taki, M., Slee, P., ... Kwak, K. (2009). Investigating the comparability of a self-report measure of childhood bullying across countries. *Canadian Journal of School Psychology*, 24, 82-93. doi:10.1177/0829573509331614
- Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, *140*(4), 1073-1137. doi:10.1037/a0035618
- Kowalski, R. M., & Limber, S. P. (2013). Psychological, physical, and academic correlates of cyberbullying and traditional bullying. *Journal of Adolescent Health*, *53*, S13-S20. doi:10.1016/j.jadohealth.2012.09.018
- Ladd, G. W., & Profilet, S. M. (1996). The Child Behavior Scale: A teacher-report measure of young children's aggressive, withdrawn, and prosocial behaviors. *Developmental Psychology*, *32*, 1008-1024. doi:10.1037/0012-1649.32.6.1008
- Lam, L. T., & Li, Y. (2013). The validation of the E-Victimization Scale (E-VS) and the E-Bullying Scale (E-BS) for adolescents. *Computers in Human Behavior*, 29, 3-7. doi: 10.1016/j.chb.2012.06.021
- Lamb, J., Pepler, D. J., & Craig, W. (2009). Approach to bullying and victimization. *Canadian Family Physician*, 55, 356-360.
- Lambe, L. J., & Craig, W. M. (2017). Bullying involvement and adolescent substance use: A multilevel investigation of individual and neighbourhood risk factors. *Drug and Alcohol Dependence*, 178, 461-468. doi:10.1016/j.drugalcdep.2017.05.037
- Leon-Perez, J. M., Notelaers, G., Arenas, A., Munduate, L., & Medina, F. J. (2014). Identifying victims of workplace bullying by integrating traditional estimation approaches into a latent class cluster model. *Journal of Interpersonal Violence*, 29, 1155-1177. doi:10.1177/0886260513506280
- Lereya, S. T., Copeland, W. E., Costello, E. J., & Wolke, D. (2015). Adult mental health consequences of peer bullying and maltreatment in childhood: Two cohorts in two countries. *The Lancet Psychiatry*, 2, 524-531. doi:10.1016/S2215-0366(15)00165-0

- 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, 1461-1471. doi:10.1007/s00787-015-0705-5
- Levasseur, C., Desbiens, N., & Bowen, F. (2017). Moral reasoning about school bullying in involved adolescents. *Journal of Moral Education*, *46*, 158-176. doi:10.1080/03057240.2016.1268113
- Liu, J., Cao, F., Li, P., Lou, F., & Lavebratt, C. (2016). 5-HTTLPR, victimization and ecological executive function of adolescents. *Psychiatry Research*, 237, 55-59. doi:10.1016/j.psychres.2016.01.059
- Lomas, J., Stough, C., Hansen, K., & Downey, L. A. (2012). Brief report: Emotional intelligence, victimisation and bullying in adolescents. *Journal of Adolescence*, *35*, 207-211. doi:10.1016/j.adolescence.2011.03.002
- Lucas-Molina, B., Williamson, A. A., Pulido, R., & Calderón, S. (2014). Adaptation of the Participant Role Scale (PRS) in a Spanish youth sample: Measurement invariance across gender and relationship with sociometric status. *Journal of Interpersonal Violence*, 29, 2904-2930. doi:10.1177/0886260514527822
- Luebbers, S., Downey, L. A., & Stough, C. (2007). The development of an adolescent measure of EI. *Personality and Individual Differences*, 42, 999-1009. doi:10.1016/j.paid.2006.09.009
- Ma, H. K. (2012). Moral competence as a positive youth development construct: A conceptual review. *The Scientific World Journal*, 1-8. doi:10.1100/2012/590163
- Ma, T.-L., & Chan, H.-Y. (2020). Patterns of adolescents' coping with bullying and peer victimization: The link to psychosocial maladjustment and the role of school bonding. *International Journal of Bullying Prevention*. doi: 10.1007/s42380-020-00063-6
- 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 metaanalytic review of individual and peer-relational characteristics. *Psychological Bulletin*, 145, 891-928. doi: 10.1037/bul0000205
- Machackova, H., & Pfetsch, J. (2016). Bystanders' responses to offline bullying and cyberbullying: The role of empathy and normative beliefs about aggression. *Scandinavian Journal of Psychology*, *57*, 169-176. doi:10.1111/sjop.12277
- Martínez, J., Rodríguez-Hidalgo, A. J., & Zych, I. (2020). Bullying and cyberbullying in adolescents from disadvantaged areas: Validation of questionnaires; prevalence rates; and

- relationship to self-esteem, empathy and social skills. *International Journal of Environmental Research and Public Health*, *17*, 6199. doi: 10.3390/ijerph17176199
- Mazzone, A., & Camodeca, M. (2019). Bullying and moral disengagement in early adolescence: Do personality and family functioning matter? *Journal of Child and Family Studies*, 28, 2120-2130. doi: 10.1007/s10826-019-01431-7
- McAlister, A. L. (2001). Moral disengagement: Measurement and modification. *Journal of Peace Research*, *38*, 87-99. doi:10.1177/0022343301038001005
- McKown, C., Gumbiner, L. M., Russo, N. M., & Lipton, M. (2009). Social-emotional learning skill, self-regulation, and social competence in typically developing and clinic-referred children. *Journal of Clinical Child & Adolescent Psychology*, *38*, 858-871. doi:10.1080/15374410903258934
- Neary, A., & Joseph, S. (1994). Peer victimization and its relationship to self-concept and depression among schoolgirls. *Personality and Individual Differences*, *16*, 183-186. doi: 10.1016/0191-8869(94)90122-8.
- Menesini, E., Nocentini, A., & Calussi, P. (2011). The measurement of cyberbullying: Dimensional structure and relative item severity and discrimination. *Cyberpsychology, Behavior, and Social Networking*, *14*, 267-274. doi:10.1089/cyber.2010.0002
- Miyake, A., & Friedman, N. P. (2012). The nature and organization of individual differences in executive functions: Four general conclusions. *Current Directions in Psychological Science*, *21*, 8-14. doi:10.1177/0963721411429458
- Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health*, *55*, 602-611. doi:10.1016/j.jadohealth.2014.06.007
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of Internal Medicine*, *151*, 264-269, W64. doi:10.1016/j.ijsu.2010.02.007
- Montagne, B., Kessels, R. P. C., De Haan, E. H. F., & Perrett, D. I. (2007). The Emotion Recognition Task: A paradigm to measure the perception of facial emotional expressions at different intensities. *Perceptual and Motor Skills*, *104*, 589-598. doi:10.2466/pms.104.2.589-598
- Morgan, A. B., & Lilienfeld, S. O. (2000). A meta-analytic review of the relation between antisocial behavior and neuropsychological measures of executive function. *Clinical Psychology Review*, 20, 113-136. doi:10.1016/S0272-7358(98)00096-8

- Moritz, S., Jahns, A. K., Schröder, J., Berger, T., Lincoln, T. M., Klein, J. P., & Göritz, A. S. (2016). More adaptive versus less maladaptive coping: What is more predictive of symptom severity? Development of a new scale to investigate coping profiles across different psychopathological syndromes. *Journal of Affective Disorders*, 191, 300-307. doi:10.1016/j.jad.2015.11.027
- Muñoz, P. E., Casas, J. A., Del Rey, R., Ortega-Ruiz, R., Cerda, G., & Pérez, C. (2018). Validation and cross-cultural robustness of the School-wide Climate Scale (SCS) across Spanish and Chilean students. *Studies in Educational Evaluation*, *56*, 182-188. doi: 10.1016/j.stueduc.2018.01.002
- Murray-Harvey, R., Skrzypiec, G., & Slee, P. T. (2012). Effective and ineffective coping with bullying strategies as assessed by informed professionals and their use by victimised students. *Australian Journal of Guidance and Counselling*, 22, 122-138. doi:10.1017/jgc.2012.5
- Naglieri, J. A., & Goldstein, S. (2012). *Comprehensive Executive Functioning Index*. Multi Health Systems.
- Nasheeda, A., Abdullah, H. B., Krauss, S. E., & Ahmed, N. B. (2019). A narrative systematic review of life skills education: Effectiveness, research gaps and priorities. *International Journal of Adolescence and Youth*, 24, 362-379.

  doi:10.1080/02673843.2018.1479278
- Nickerson, A. B., & Mele-Taylor, D. (2014). Empathetic responsiveness, group norms, and prosocial affiliations in bullying roles. *School Psychology Quarterly*, 29(1), 99-109. doi:10.1037/spq0000052
- Nixon, C. L. (2014). Current perspectives: The impact of cyberbullying on adolescent health. *Adolescent Health, Medicine and Therapeutics*, *5*, 143-158. doi:10.2147/AHMT.S36456
- Nowicki, S. (2013). *Manual for the receptive tests of the diagnostic analysis of nonverbal accuracy 2 (DANVA2)*. Unpublished manuscript, Emory University, Atlanta, Georgia.
- Obermann, M.-L. (2011). Moral disengagement among bystanders to school bullying. *Journal of School Violence*, *10*, 239-257. doi:10.1080/15388220.2011.578276
- Obermann, M.-L. (2013). Temporal aspects of moral disengagement in school bullying: Crystallization or escalation? *Journal of School Violence*, *12*, 193-210. doi:10.1080/15388220.2013.766133
- Ogilvie, J. M., Stewart, A. L., Chan, R. C. K., & Shum, D. H. K. (2011). Neuropsychological measures of executive function and antisocial behavior: A meta-analysis. *Criminology*, 4, 1063-1107. doi:10.1111/j.1745-9125.2011.00252.x

- Olweus, D. (1994). Bullying at school. In *Aggressive behavior* (pp. 97-130). Boston, MA: Springer. doi:10.1007/978-1-4757-9116-7\_5
- Olweus, D. (1995). Bullying or peer abuse at school: Facts and intervention. *Current Directions in Psychological Science*, *4*, 196-200. doi:10.1111/1467-8721.ep10772640
- Olweus, D. (2006). Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry*, *35*, 1171-1190. doi:10.1111/j.1469-7610.1994.tb01229.x
- Olweus, D., & Limber, S. P. (2010). The Olweus bullying prevention program. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds), *The handbook of bullying in schools:*An international perspective (p. 27). Routledge.
- Orue, I., & Calvete, E. (2016). Psychopathic traits and moral disengagement interact to predict bullying and cyberbullying among adolescents. *Journal of Interpersonal Violence*, *34*, 2313-2332. doi: 10.1177/0886260516660302
- Parada, R. H. (2000). Adolescent Peer Relations Instrument: A theoretical and empirical basis for the measurement of participant roles in bullying and victimization of adolescence: An interim test manual and a research monograph: A test manual. SELF Research Centre, University of Western Sydney.
- Parris, L., Varjas, K., Meyers, J., Henrich, C., & Brack, J. (2019). Coping with bullying: The moderating effects of self-reliance. *Journal of School Violence*, *18*, 62-76. doi: 10.1080/15388220.2017.1387131
- Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of School Health*, 80, 614-621. doi:10.1111/j.1746-1561.2010.00548.x
- Pettalia, J. L., Levin, E., & Dickinson, J. (2013). Cyberbullying: Eliciting harm without consequence. *Computers in Human Behavior*, 29, 2758-2765. doi:10.1016/j.chb.2013.07.020
- 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, 47-65.
- Polat, S., & Günçavdı, G. (Eds.). (2020). Empowering multiculturalism and peacebuilding in schools: IGI global. doi.org/10.4018/978-1-7998-2827-3
- Pornari, C. D., & Wood, J. (2010). Peer and cyber aggression in secondary school students: The role of moral disengagement, hostile attribution bias, and outcome expectancies. *Aggressive Behavior*, *36*, 81-94. doi:10.1002/ab.20336

- Pozzoli, T., Gini, G., & Altoè, G. (2017). Associations between facial emotion recognition and young adolescents' behaviors in bullying. *Plos One*, *12*, e0188062. doi:10.1371/journal.pone.0188062
- Prencipe, A., Kesek, A., Cohen, J., Lamm, C., Lewis, M. D., & Zelazo, P. D. (2011).

  Development of hot and cool executive function during the transition to adolescence. *Journal of Experimental Child Psychology*, *108*, 621-637. doi:10.1016/j.jecp.2010.09.008
- Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child & Adolescent Psychology*, *30*, 479-491. doi:10.1207/S15374424JCCP3004\_05
- Raaijmakers, M. A. J., Smidts, D. P., Sergeant, J. A., Maassen, G. H., Posthumus, J. A., van Engeland, H., & Matthys, W. (2008). Executive functions in preschool children with aggressive behavior: Impairments in inhibitory control. *Journal of Abnormal Child Psychology*, *36*, 1097-1107. doi:10.1007/s10802-008-9235-7
- Radliff, K. M., Wheaton, J. E., Robinson, K., & Morris, J. (2012). Illuminating the relationship between bullying and substance use among middle and high school youth. *Addictive Behaviors*, *37*, 569-572. doi:10.1016/j.addbeh.2012.01.001
- Ragatz, L. L., Anderson, R. J., Fremouw, W., & Schwartz, R. (2011). Criminal thinking patterns, aggression styles, and the psychopathic traits of late high school bullies and bully-victims. *Aggressive Behavior*, *37*, 145-160. doi:10.1002/ab.20377
- Reijntjes, A., Kamphuis, J. H., Prinzie, P., & Telch, M. J. (2010). Peer victimization and internalizing problems in children: A meta-analysis of longitudinal studies. *Child Abuse & Neglect*, *34*, 244-252. doi:10.1016/j.chiabu.2009.07.009
- Rémond, J.-J., Kern, L., & Romo, L. (2015). Étude sur la "cyber-intimidation": Cyberbullying, comorbidités et mécanismes d'adaptations [A cyberbullying study: Analysis of cyberbullying, comorbidities and coping mechanisms]. *L'Encéphale*, 41, 287-294. doi:10.1016/j.encep.2014.08.003
- Renati, R., Berrone, C., & Zanetti, M. A. (2012). Morally disengaged and unempathic: Do cyberbullies fit these definitions? An exploratory study. *Cyberpsychology, Behavior, and Social Networking*, *15*, 391-398. doi:10.1089/cyber.2012.0046
- Ribeaud, D., & Eisner, M. (2010). Are moral disengagement, neutralization techniques, and self-serving cognitive distortions the same? Developing a unified Scale of Moral Neutralization of Aggression. *International Journal of Conflict and Violence*, *4*, 298-315. doi:10.4119/UNIBI/ijcv.92

- Rigby, K. (2002). New perspectives on bullying. Jessica Kingsley.
- Rigby, K. (2004). Addressing bullying in schools: Theoretical perspectives and their implications. *School Psychology International*, *25*, 287-300. doi: 10.1177/0143034304046902
- Rigby, K., & Slee, P. T. (1991). Bullying among Australian school children: Reported behavior and attitudes toward victims. *The Journal of Social Psychology*, *131*, 615-627. doi:10.1080/00224545.1991.9924646
- Riggs, N. R., Jahromi, L. B., Razza, R. P., Dillworth-Bart, J. E., & Mueller, U. (2006). Executive function and the promotion of social–emotional competence. *Journal of Applied Developmental Psychology*, 27, 300-309. doi:10.1016/j.appdev.2006.04.002
- Rivers, I., Poteat, V. P., Noret, N., & Ashurst, N. (2009). Observing bullying at school: The mental health implications of witness status. *School Psychology Quaterly*, 24, 211-223. doi: 10.1037/a0018164
- Robson, C., & Witenberg, R. T. (2013). The influence of moral disengagement, morally based self-esteem, age, and gender on traditional bullying and cyberbullying. *Journal of School Violence*, *12*, 211-231. doi:10.1080/15388220.2012.762921
- Romine, C. B., & Reynolds, C. R. (2005). A model of the development of frontal lobe functioning: Findings from a meta-analysis. *Applied Neuropsychology*, *12*, 190-201. doi:10.1207/s15324826an1204\_2
- Rowsell, H. C., Ciarrochi, J., Heaven, P. C. L., & Deane, F. P. (2014). The role of emotion identification skill in the formation of male and female friendships: A longitudinal study. *Journal of Adolescence*, 37, 103-111. doi:10.1016/j.adolescence.2013.11.005
- Runions, K. C., Shaw, T., Bussey, K., Thornberg, R., Salmivalli, C., & Cross, D. S. (2019). Moral disengagement of pure bullies and bully/victims: Shared and distinct mechanisms. *Journal of Youth and Adolescence*, 48, 1835-1848. doi: 10.1007/s10964-019-01067-2
- Ryoo, J. H., Wang, C., & Swearer, S. M. (2015). Examination of the change in latent statuses in bullying behaviors across time. *School Psychology Quarterly*, *30*, 105-122. doi:10.1037/spq0000082
- Ryzin, M. J., & Roseth, C. J. (2019). Effects of cooperative learning on peer relations, empathy, and bullying in middle school. *Aggressive Behavior*, 45, 643-651. doi: 10.1002/ab.21858
- Sagkal, A. S., Turnuklu, A., & Totan, T. (2012). Empathy for interpersonal peace: Effects of peace education on empathy skills. *Educational Sciences: Theory and Practice*, *12*, 1454-1460.

- Sahdra, B. K., Ciarrochi, J., Parker, P. D., Marshall, S., & Heaven, P. (2015). Empathy and nonattachment independently predict peer nominations of prosocial behavior of adolescents. *Frontiers in Psychology*, *6*, 263. doi:10.3389/fpsyg.2015.00263
- Salmivalli, C., Lagerspetz, K., Björkqvist, K., Osterman, K., & Kaukiainen, A. (1996).

  Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, 22, 1-15. doi:10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T
- Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behaviour in bullying situations. *International Journal of Behavioral Development*, 28, 246-258. doi:10.1080/01650250344000488
- Schneider, S. K., O'Donnell, L., Stueve, A., & Coulter, R. W. S. (2012). Cyberbullying, school bullying, and psychological distress: A regional census of high school students. *American Journal of Public Health*, *102*, 171-177. doi:10.2105/AJPH.2011.300308
- Schultze-Krumbholz, A., Zagorscak, P., Hess, M., & Scheithauer, H. (2020). The Influence of school climate and empathy on cyberbystanders' intention to assist or defend in cyberbullying. *International Journal of Bullying Prevention*, 2, 16-28. doi: 10.1007/s42380-019-00040-8
- Seals, D., & Young, J. (2003). Bullying and victimization: Prevalence and relationship to gender, grade level, ethnicity, self-esteem, and depression. *Adolescence*, *38*, 735-747.
- Seiffge-Krenke, I., Aunola, K., & Nurmi, J.-E. (2009). Changes in stress perception and coping during adolescence: The role of situational and personal factors. *Child Development*, 80, 259-279. doi:10.1111/j.1467-8624.2008.01258.x
- Serin, O., Serin, N. B., & Saygili, G. (2010). İlkogretim duzeyindeki Cocuklar icin Problem Cozme Envanteri'nin (CPCE) gelistirilmesi. *Ilkogretim Online*, *9*, 446-458.
- Shakoor, S., Jaffee, S. R., Bowes, L., Ouellet-Morin, I., Andreou, P., Happé, F., ...

  Arseneault, L. (2012). A prospective longitudinal study of children's theory of mind and adolescent involvement in bullying: Theory of mind and adolescent involvement in bullying. *Journal of Child Psychology and Psychiatry*, 53, 254-261. doi:10.1111/j.1469-7610.2011.02488.x
- Shamay-Tsoory, S. G., Aharon-Peretz, J., & Perry, D. (2009). Two systems for empathy: A double dissociation between emotional and cognitive empathy in inferior frontal gyrus versus ventromedial prefrontal lesions. *Brain*, *132*, 617-627. doi:10.1093/brain/awn279

- Sigurdson, J. F., Wallander, J., & Sund, A. M. (2014). Is involvement in school bullying associated with general health and psychosocial adjustment outcomes in adulthood? *Child Abuse & Neglect*, *38*, 1607-1617. doi:10.1016/j.chiabu.2014.06.001
- Sim, T. N., & Tan, M. M. (2013). Behavioral norms, moral judgments, and social approval of participant roles in school bullying in a Singapore sample. *Youth & Society*, *45*, 184-200. doi:10.1177/0044118X11410080
- Singh, P., & Bussey, K. (2011). Peer victimization and psychological maladjustment: The mediating role of coping self-efficacy: Peer victimization and maladjustment. *Journal of Research on Adolescence*, 21, 420-433. doi:10.1111/j.1532-7795.2010.00680.x
- Sitzer, P., Marth, J., Kocil, C., & Müller, K. N. (2012). *Ergebnisbericht der Online-Studie, Cyberbullying bei Schülerinnen und Schülern*. Institut für Interdisziplinäre Konflikt-und
  Gewaltforschung
- Skrzypiec, G. K., Askell-Williams, H., Slee, P. T., & Lawson, M. (2018). Involvement in high school: A survival analysis approach. *Violence and Victims*, *33*, 563-582. doi:10.1891/0886-6708.VV-D-17-00009
- Skrzypiec, G., Slee, P., Murray-Harvey, R., & Pereira, B. (2011). School bullying by one or more ways: Does it matter and how do students cope? *School Psychology International*, 32, 288-311. doi:10.1177/0143034311402308
- Slaughter, V., Imuta, K., Peterson, C. C., & Henry, J. D. (2015). Meta-analysis of theory of mind and peer popularity in the preschool and early school years. *Child Development*, 86, 1159-1174. doi:10.1111/cdev.12372
- Slonje, R., & Smith, P. K. (2008). Cyberbullying: Another main type of bullying? Scandinavian Journal of Psychology, 49, 147-154. doi:10.1111/j.1467-9450.2007.00611.x
- Slonje, R., Smith, P. K., & Frisén, A. (2012). Processes of cyberbullying, and feelings of remorse by bullies: A pilot study. *European Journal of Developmental Psychology*, 9, 244-259. doi:10.1080/17405629.2011.643670
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The Brief Resilience Scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194-200. doi:10.1080/10705500802222972
- Smith, P. K. (2017). Bullying and theory of mind: A review. *Current Psychiatry Reviews*, *13*, 90-95. doi:10.2174/1573400513666170502123214

- Song, J., & Oh, I. (2018). Factors influencing bystanders' behavioral reactions in cyberbullying situations. *Computers in Human Behavior*, 78, 273-282. doi:10.1016/j.chb.2017.10.008
- Sourander, A., Klomek, A. B., Ikonen, M., Lindroos, J., Luntamo, T., Koskelainen, M., ... Helenius, H. (2010). Psychosocial risk factors associated with cyberbullying among adolescents: A population-based study. *Archives of General Psychiatry*, 67, 720-728. doi:10.1001/archgenpsychiatry.2010.79
- Spear, L. P. (2013). Adolescent neurodevelopment. *The Journal of Adolescent Health*, 52, S7-13. doi:10.1016/j.jadohealth.2012.05.006
- Srikala, B., & Kumar, K. (2010). Empowering adolescents with life skills education in schools School mental health program: Does it work? *Indian Journal of Psychiatry*, *52*, 344-349. doi:10.4103/0019-5545.74310
- Stanbury, S., Bruce, M. A., Jain, S., & Stellern, J. (2009). The effects of an empathy building program on bullying behavior. *Journal of School Counseling*, 7.
- Steffgen, G., König, A., Pfetsch, J., & Melzer, A. (2011). Are cyberbullies less empathic? Adolescents' cyberbullying behavior and empathic responsiveness. *Cyberpsychology, Behavior, and Social Networking*, *14*, 643-648. doi:10.1089/cyber.2010.0445
- Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, *9*, 69-74. doi:10.1016/j.tics.2004.12.005
- Such, E., & Walker, R. (2004). Being responsible and responsible beings: Children's understanding of responsibility. *Children & Society*, *18*, 231-242. doi:10.1002/chi.795
- Suls, J., & Fletcher, B. (1985). The relative efficacy of avoidant and nonavoidant coping strategies: A meta-analysis. *Health Psychology*, *4*, 249-288.
- Sutton, J., & Smith, P.K. (1999). Bullying as a group process: An adaptation of the participant role approach. *Aggressive Behavior*, 25, 97-111. doi:10.1002/(SICI)1098-2337(1999)25:2<97::AID-AB3>3.0.CO;2-7
- Takizawa, R., Maughan, B., & Arseneault, L. (2014). Adult health outcomes of childhood bullying victimization: Evidence from a five-decade longitudinal British birth cohort. *The American Journal of Psychiatry*, 171, 777-784. doi:10.1176/appi.ajp.2014.13101401
- Tenenbaum, L., Varjas, K., Meyers, J., & Parris, L. (2012). Coping with bullying: Victims self-reported coping strategies and perceived effectiveness. *School Psychology International*, *32*, 263-287. doi: 10.1177/014304311402309

- Teng, Z., Bear, G. G., Yang, C., Nie, Q., & Guo, C. (2020). Moral disengagement and bullying perpetration: A longitudinal study of the moderating effect of school climate. *School Psychology*, *35*, 99-109. doi: 10.1037/spq0000348
- Thomas, H. J., Connor, J. P., & Scott, J. G. (2015). Integrating traditional bullying and cyberbullying: Challenges of definition and measurement in adolescents a review. *Educational Psychology Review*, 27, 135-152. doi:10.1007/s10648-014-9261-7
- Thompson, D., Arora, T., & Sharp, S. (2002). *Bullying: Effective strategies for long-term improvement*. Routledge.
- Thornberg, R., & Jungert, T. (2013). Bystander behavior in bullying situations: Basic moral sensitivity, moral disengagement and defender self-efficacy. *Journal of Adolescence*, 36(3), 475-483. doi:10.1016/j.adolescence.2013.02.003
- Thornberg, R., & Jungert, T. (2014). School bullying and the mechanisms of moral disengagement: School bullying and the mechanisms. *Aggressive Behavior*, 40, 99-108. doi:10.1002/ab.21509
- Thornberg, R., Tenenbaum, L., Varjas, K., Meyers, J., Jungert, T., & Vanegas, G. (2012).

  Bystander motivation in bullying incidents: To intervene or not to intervene? *Western Journal of Emergency Medicine*, *13*, 247-252. doi:10.5811/westjem.2012.3.11792
- Tognetta, L. R., Martinez, J. M., & Da Fonseca, P. J. (2016). Bullying, un problema moral: Representaciones de sí mismo y desconexiones morales [Bullying, a moral issue: Representations of self and moral disconnects.]. *Revista de Educación*, 373, 9-34. doi:10.4438/1988-592X-RE-2016-373-319
- Topcu, C., & Erdur-Baker, O. (2012). Affective and cognitive empathy as mediator of gender differences in cyber and traditional bullying. *School Psychology International*, *33*, 550-561. doi:10.1177/0143034312446882
- Tsitsika, A. K., Barlou, E., Andrie, E., Dimitropoulou, C., Tzavela, E. C., Janikian, M., & Tsolia, M. (2014). Bullying behaviors in children and adolescents: "An ongoing story". *Frontiers in Public Health*, 2. doi: 10.3389/fpubh.2014.00007
- Ttofi, M. M., Bowes, L., Farrington, D. P., & Lösel, F. (2014). Protective factors interrupting the continuity from school bullying to later internalizing and externalizing problems: A systematic review of prospective longitudinal studies. *Journal of School Violence*, *13*, 5-38. doi:10.1080/15388220.2013.857345
- Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology*, 7, 27-56. doi:10.1007/s11292-010-9109-1

- Turner, M. G., Exum, M. L., Brame, R., & Holt, T. J. (2013). Bullying victimization and adolescent mental health: General and typological effects across sex. *Journal of Criminal Justice*, *41*, 53-59. doi:10.1016/j.jcrimjus.2012.12.005
- Twemlow, S. W., & Sacco, F. C. (2013). How & why does bystanding have such a startling impact on the architecture of school bullying and violence? *International Journal of Applied Psychoanalytic Studies*, *10*, 289-306. doi:10.1002/aps.1372
- Ullman, S. E. (1996). Social reactions, coping strategies, and self-blame attributions in adjustment to sexual assault. *Psychology of Women Quarterly*, 20, 505-526. doi:10.1111/j.1471-6402.1996.tb00319.x
- van Geel, M., Vedder, P., & Tanilon, J. (2014). Relationship between peer victimization, cyberbullying, and suicide in children and adolescents: A meta-analysis. *JAMA Pediatrics*, *168*, 435-442. doi:10.1001/jamapediatrics.2013.4143
- 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*, 40, 637-657. doi:10.1007/s10964-014-0135-6
- Varjas, K., Henrich, C., & Meyers, J. (2009). Urban middle school students' perceptions of bullying, cyberbullying and school safety. *Journal of School Violence*, 8,159-176. doi: 10.1080/15388220802074165
- Veenstra, R., Lindenberg, S., Oldehinkel, A. J., De Winter, A. F., Verhulst, F. C., & Ormel, J. (2005). Bullying and victimization in elementary schools: A comparison of bullies, victims, bully/victims, and uninvolved preadolescents. *Developmental Psychology*, 41, 672-682. doi:10.1037/0012-1649.41.4.672
- Verlinden, M., Veenstra, R., Ghassabian, A., Jansen, P. W., Hofman, A., Jaddoe, V. W. V., ... Tiemeier, H. (2014). Executive functioning and non-verbal intelligence as predictors of bullying in early elementary school. *Journal of Abnormal Child Psychology*, 42, 953-966. doi:10.1007/s10802-013-9832-y
- Vetter, N. C., Altgassen, M., Phillips, L., Mahy, C. E. V., & Kliegel, M. (2013). Development of affective theory of mind across adolescence: Disentangling the role of executive functions. *Developmental Neuropsychology*, *38*, 114-125. doi:10.1080/87565641.2012.733786
- Volland, C., Ulich, D., Kienbaum, J., & Hölzle, E. (2008). Doing gender by doing emotion? Die geschlechtsspezifische Entwicklung der Mitgefühlsbereitschaft im Jugendalter. *Psychologie in Erziehung und Unterricht*, 55, 27-38.

- von Grundherr, M., Geisler, A., Stoiber, M., & Schäfer, M. (2017). School bullying and moral reasoning competence: School bullying and moral reasoning competence. *Social Development*, 26, 278-294. doi:10.1111/sode.12199
- Wachs, S. (2012). Moral disengagement and emotional and social difficulties in bullying and cyberbullying: Differences by participant role. *Emotional and Behavioural Difficulties*, 17, 347-360. doi:10.1080/13632752.2012.704318
- Walters, G. D., & Espelage, D. L. (2019). Cognitive/affective empathy, pro-bullying beliefs, and willingness to intervene on behalf of a bullied peer. *Youth & Society*, 0044118X1985856. doi: 10.1177/0044118X19858565
- Wang, C., Ryoo, J. H., Swearer, S. M., Turner, R., & Goldberg, T. S. (2017). Longitudinal relationships between bullying and moral disengagement among adolescents. *Journal of Youth and Adolescence*, 46, 1304-1317. doi:10.1007/s10964-016-0577-0
- Wang, X., Yang, J., Wang, P., Zhang, Y., Li, B., Xie, X., & Lei, L. (2020). Deviant peer affiliation and bullying perpetration in adolescents: The mediating role of moral disengagement and the moderating role of moral identity. *The Journal of Psychology*, 154, 199-213. doi: 10.1080/00223980.2019.1696733
- Wang, X., Zhao, F., Yang, J., Gao, L., Li, B., Lei, L., & Wang, P. (2020). Childhood maltreatment and bullying perpetration among Chinese adolescents: A moderated mediation model of moral disengagement and trait anger. *Child Abuse & Neglect*, 106, 104507. doi: 10.1016/j.chiabu.2020.104507
- Williams, A., O'Driscoll, K., & Moore, C. (2014). The influence of empathic concern on prosocial behavior in children. *Frontiers in Psychology*, *5*, 1-8. doi:10.3389/fpsyg.2014.00425
- Wolke, D., & Lereya, S. T. (2015). Long-term effects of bullying. *Archives of Disease in Childhood*, 100, 879-885. doi:10.1136/archdischild-2014-306667
- Wong, N. T., Zimmerman, M. A., & Parker, E. A. (2010). A typology of youth participation and empowerment for child and adolescent health promotion. *American Journal of Community Psychology*, 46, 100-114. doi:10.1007/s10464-010-9330-0
- Woods, S., Wolke, D., Nowicki, S., & Hall, L. (2009). Emotion recognition abilities and empathy of victims of bullying. *Child Abuse & Neglect*, *33*, 307-311. doi:10.1016/j.chiabu.2008.11.002
- World Health Organization (1997). *Life skills education for children and adolescents in schools*. World Health Organization.

- World Health Organization (2003). Skills for health: Skills-based health education including life skills: An important component of a child-friendly/health-promoting school. World Health Organization.
- Wright, M. F. (2014). Longitudinal investigation of the associations between adolescents' popularity and cyber social behaviors. *Journal of School Violence*, *13*, 291-314. doi: 10.1080/15388220.2013.849201
- Wrzesniewski, K., & Chylinska, J. (2007). Assessment of coping styles and strategies with school-related stress. *School Psychology International*, 28, 179-194. doi:10.1177/0143034307078096
- Yang, S. A., & Kim, D. H. (2017). Factors associated with bystander behaviors of Korean youth in school bullying situations: A cross-sectional study. *Medicine*, *96*, e7757. doi:10.1097/MD.0000000000007757
- You, S., Lee, J., Lee, Y., & Kim, A. Y. (2015). Bullying among Korean adolescents: The role of empathy and attachment. *Psychology in the Schools*, *52*, 594-606. doi:10.1002/pits.21842
- Zelazo, P. D., & Carlson, S. M. (2012). Hot and cool executive function in childhood and adolescence: Development and plasticity. *Child Development Perspectives*, *6*, 354-360. doi:10.1111/j.1750-8606.2012.00246.x
- Zeman, J., Shipman, K., & Penza-Clyve, S. (2001). Development and initial validation of the Children's Sadness Management Scale. *Journal of Nonverbal Behavior*, 25, 187-205. doi:10.1023/A:1010623226626
- Zych, I., Farrington, D. P., Llorent, V. J., & Ttofi, M. M. (2017). School bullying in different countries: Prevalence, risk factors, and short-term outcomes. In *Protecting children against bullying and its consequences* (pp. 5-22). Springer.
- Zych, I., & Llorent, V. J. (2019). Affective empathy and moral disengagement related to late adolescent bullying perpetration. *Ethics & Behavior*, 29, 547-556. doi: 10.1080/10508422.2018.1521282
- Zych, I., Ttofi, M. M., & Farrington, D. P. (2019). Empathy and callous—unemotional traits in different bullying roles: A systematic review and meta-analysis. *Trauma, Violence, & Abuse*, 20, 3-21. https://doi.org/10.1177/1524838016683456